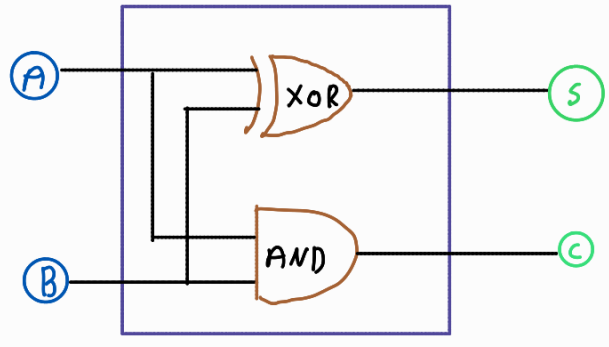
half adder;

A	B	S	C
0	0	0	0
0	1	1	0
1	0	1	0
1	1	0	1

$S = A \wedge B$

$C = A \,\&\, B$



full adder;

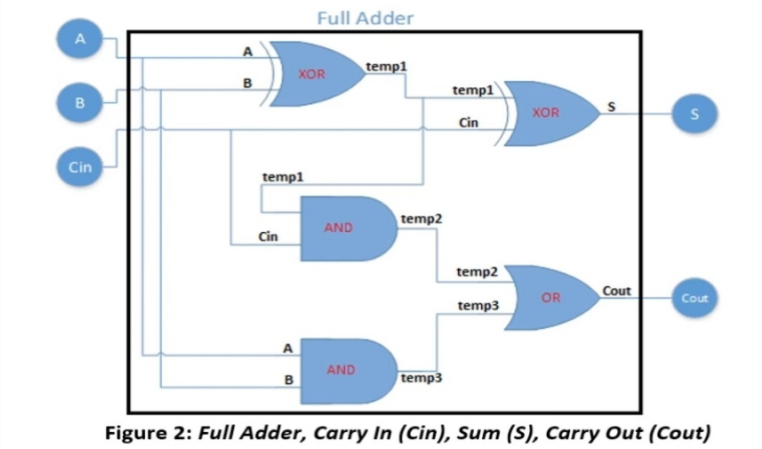


Figure 2: *Full Adder, Carry In (Cin), Sum (S), Carry Out (Cout)*

S = (A^B)^Cin

Cout = (A^B)•Cin + (A•B)

Cin	A	B	S	Cout
0	0	0	0	0
0	0	1	1	0
0	1	0	1	0
0	1	1	0	1
1	0	0	1	0
1	0	1	0	1
1	1	0	0	1
1	1	1	1	1

modular;