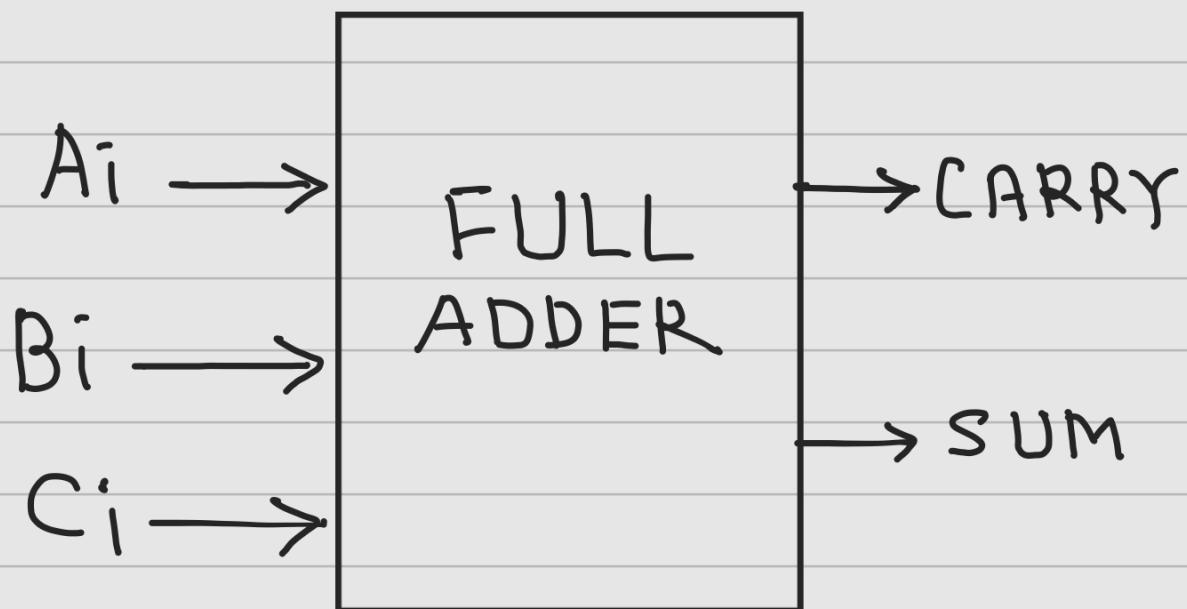


# BLOCK DIAGRAM, Truth-Table, Boolean expressions of FULL-ADDER

## BLOCK DIAGRAM

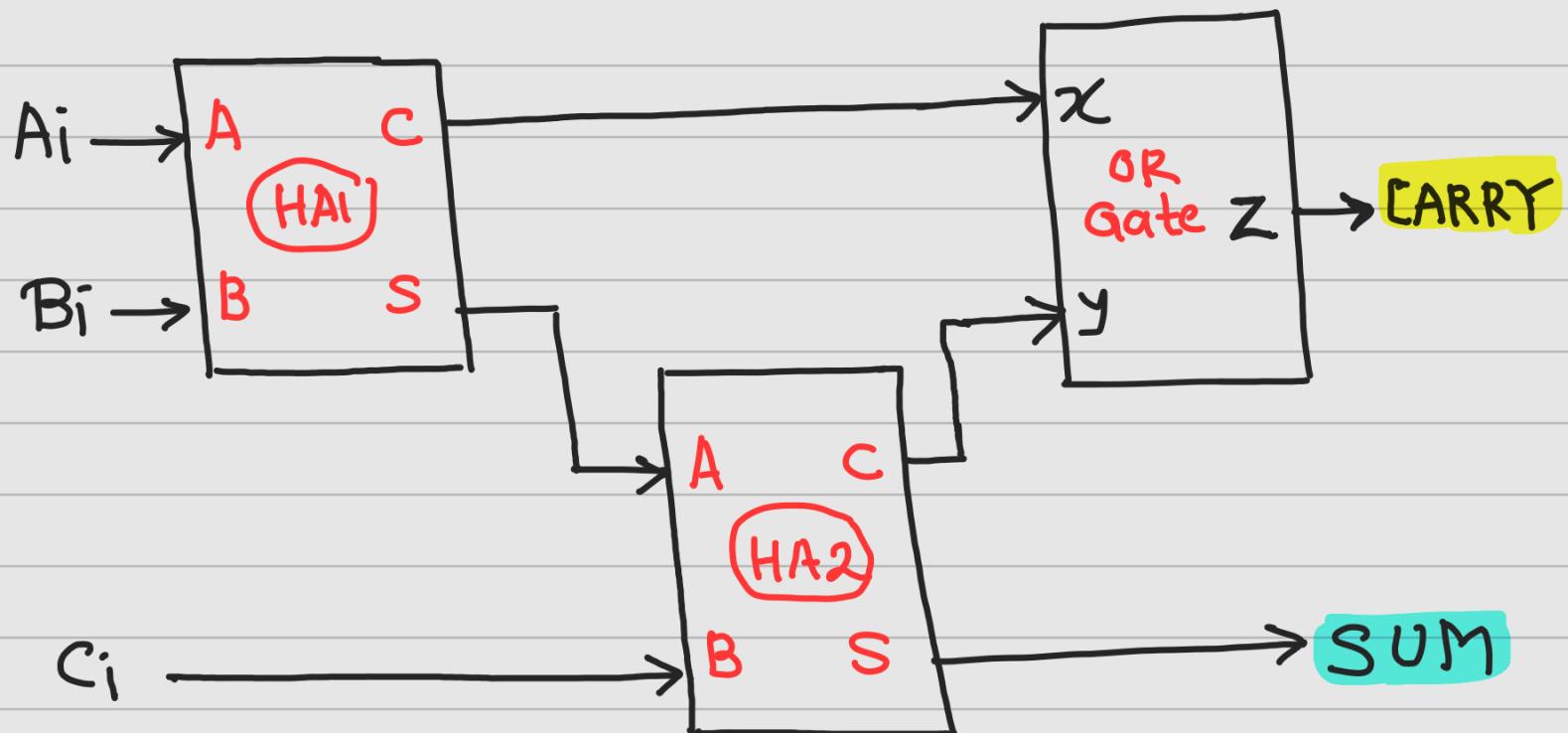
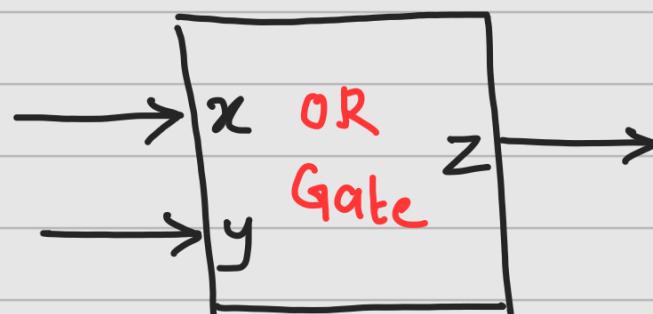
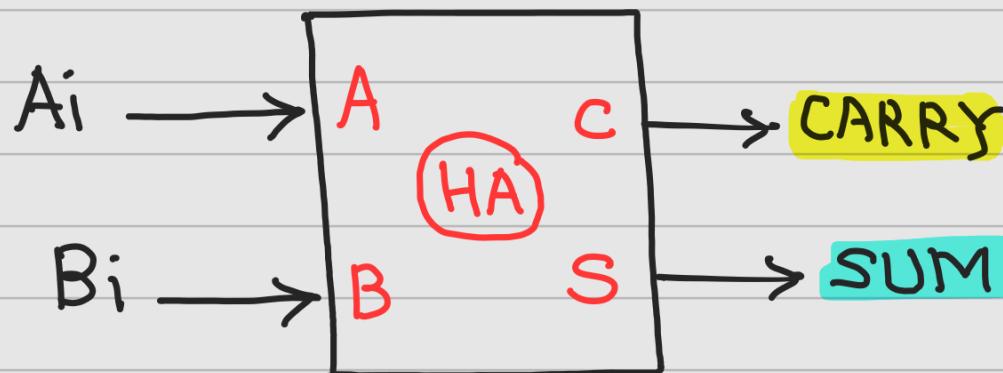


$A_i$	$B_i$	$C_i$	SUM	CARRY
0	0	0	0	0
0	0	1	1	0
0	1	0	1	0
0	1	1	0	1
1	0	0	1	0
1	0	1	0	1
1	1	0	0	1
1	1	1	1	1

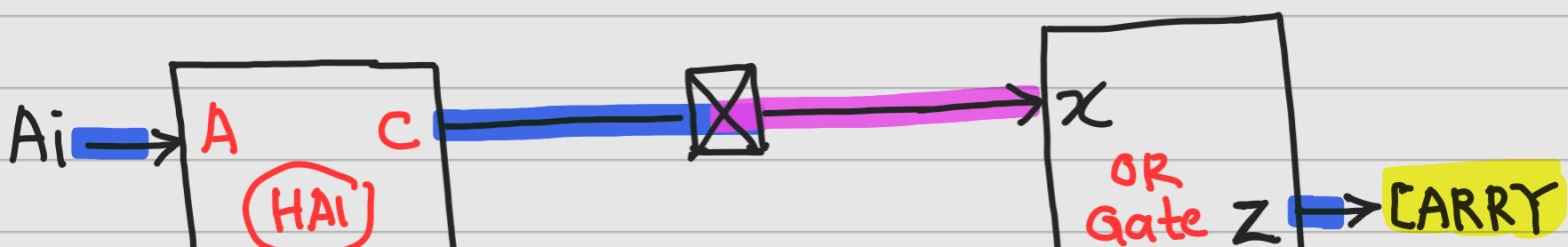
$$\text{SUM} = A_i \oplus B_i \oplus C_i$$

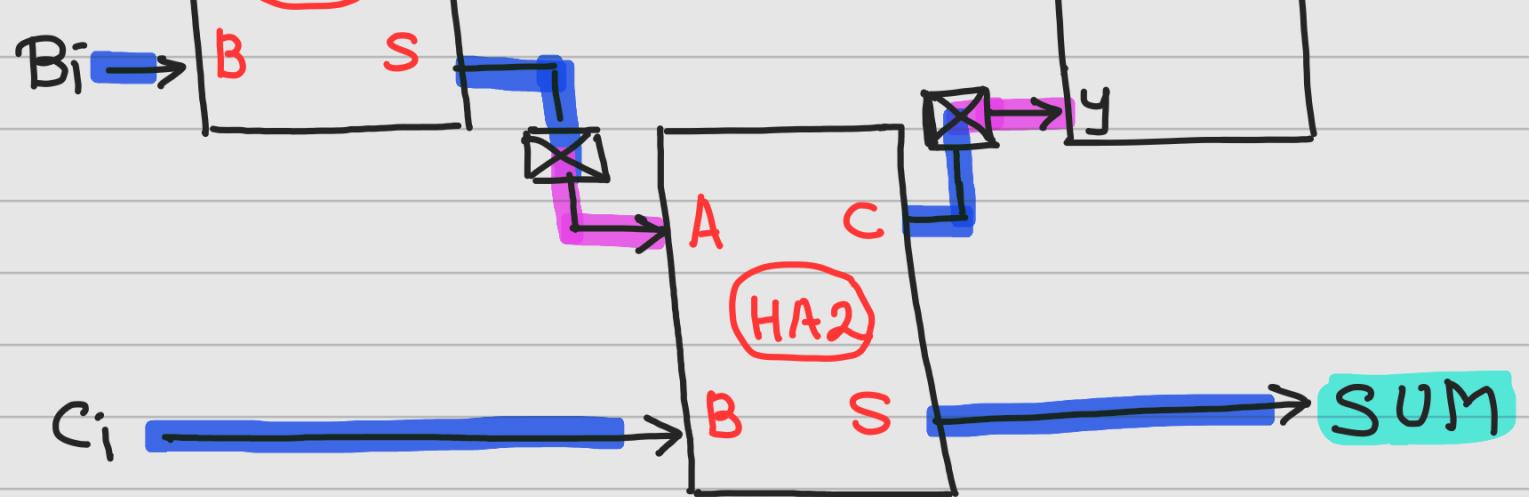
$$\text{CARRY} = A_i \cdot B_i + B_i \cdot C_i + A_i \cdot C_i$$

# FULL-ADDER USING HALF-ADDER & OR-Gate as Components.



## LAYER CONNECTIONS





Metal-1 Layer

Polysilicon Layer



Metal-1 To Polysilicon Contact

