

The student must bring this notebook correctly filled at the beginning of the corresponding lab session, where it must be shown to the assistant professor. The circuit cannot be built if this form is not completed or is incorrect.

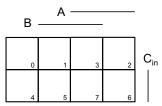
INTRODUCTION TO COMPUTERS

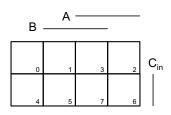
Lab 2 Notebook

1-bit full adder truth table

Cin	A	В	Cout	S
0	0	0		
0	0	1		
0	1	0		
0	1	1		
1	0	0		
1	0	1		
1	1	0		
1	1	1	·	

Karnaugh Maps





1-bit full adder design

Show for each element and port the chip number and corresponding pin

2-bit adder truth table

Cin	$\mathbf{A_1}$	$\mathbf{A_0}$	\mathbf{B}_1	$\mathbf{B_0}$	Cout	S_1	S_0
0	0	0	0	0			
0	0	0	0	1			
0	0	0	1	0			
0	0	0	1	1			
0	0	1	0	0			
0	0	1	0	1			
0	0	1	1	0			
0	0	1	1	1			
0	1	0	0	0			
0	1	0	0	1			
0	1	0	1	0			
0	1	0	1	1	·		
0	1	1	0	0			
0	1	1	0	1			
0	1	1	1	0			
0	1	1	1	1			

Cin	$\mathbf{A_1}$	$\mathbf{A_0}$	\mathbf{B}_1	\mathbf{B}_{0}	Cout	S_1	S_0
1	0	0	0	0			
1	0	0	0	1			
1	0	0	1	0			
1	0	0	1	1			
1	0	1	0	0			
1	0	1	0	1			
1	0	1	1	0			
1	0	1	1	1			
1	1	0	0	0			
1	1	0	0	1			
1	1	0	1	0			
1	1	0	1	1			
1	1	1	0	0			
1	1	1	0	1			
1	1	1	1	0			
1	1	1	1	1			

2-bit adder design

Show for each element and port the chip number and corresponding pin