## Half-Adder

A Half-Adder is a logic circuit having 2 inputs (A and B) and 2 outputs (Sum and Carry) which will perform according to table 1. The half adder circuit is shown in fig 2-3b.

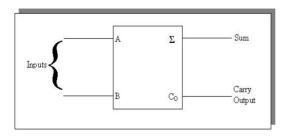


Fig 2.3a

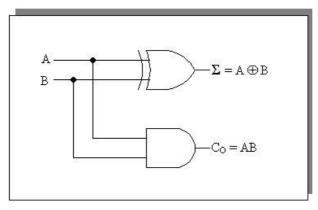


Fig 2.3b

Addition Rules					
A+B	Carry	Sum			
0+0	0	0			
0+1	0	1			
1+0	0	1			
1+1	1	0			

Table 2: Addition of 2 Binary digits