All the Logical Operators

Raymond Wang

December 2023

A	B			0 False	$\neg(A \vee B)$ A NOR B		$\neg A$ NOT A
0	0			0	1	0	1
0	1			0	0	1	1
1	0			0	0	0	0
1	1			0	0	0	0

A	B				$\neg B$ NOT B	$A \oplus B$ A XOR B	$\neg(A \wedge B)$ A NAND B
0	0			0	1	0	1
0	1			0	0	1	1
1	0			1	1	1	1
1	1			0	0	0	0

A	B			$A \wedge B$ A AND B	$A \Leftrightarrow B$ A if and only if B	B B	$A \Rightarrow B$, $B \Leftarrow A$ A implies B, if A then B
0	0			0	1	0	1
0	1			0	0	1	1
1	0			0	0	0	0
1	1			1	1	1	1

A	B			A A	$B \Rightarrow A$, $A \Leftarrow B$ B implies A, if B then A	$A \vee B$ A OR B	1 True
0	0			0	1	0	1
0	1			0	0	1	1
1	0			1	1	1	1
1	1			1	1	1	1