

State table

Present state		Input	Next state		Flip-flop inputs				Output
A	B		A <sup>+</sup>	B <sup>+</sup>	JA	KA	JB	KB	y
0	0	0	0	0	0	X	0	X	0
0	0	1	0	1	0	X	1	X	1
0	1	0	1	0	1	X	X	1	0
0	1	1	0	1	0	X	X	0	0
1	0	0	1	0	X	0	0	X	0
1	0	1	1	1	X	0	1	X	1
1	1	0	1	1	X	0	X	0	0
1	1	1	0	0	X	1	X	1	0

A \ Bx	B			
	00	01	11	10
0		1	X	X
1		1	X	X

$JB = x$

A \ Bx	B			
	00	01	11	10
0	X	X		1
1	X	X	1	

$KB = (A \oplus x)'$

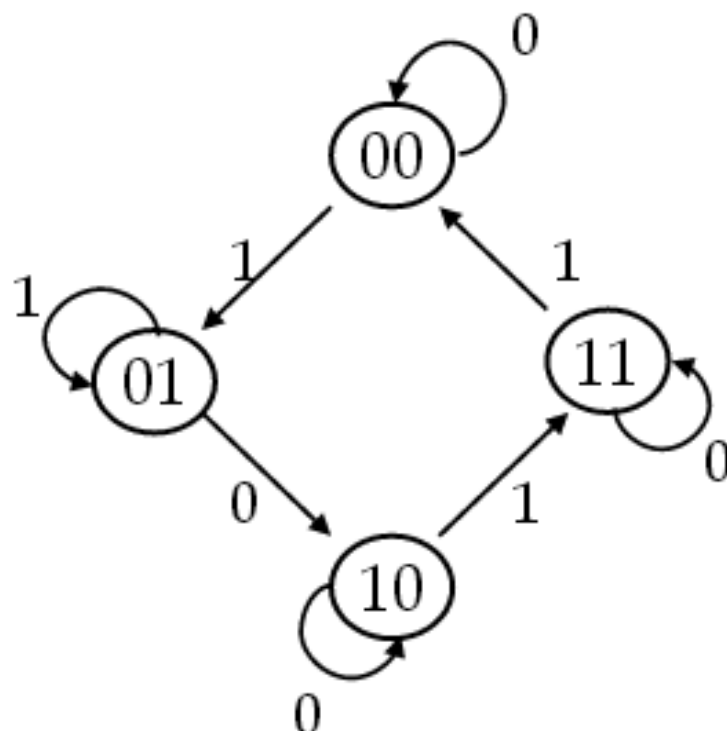
A \ Bx	B			
	00	01	11	10
0				1
1	X	X	X	X

$JA = B \cdot x'$

A \ Bx	B			
	00	01	11	10
0	X	X	X	X
1			1	

$KA = B \cdot x$

State diagram



Mochamad Aulia Akbar Praditomo  
1606827145  
PSD-C (AMB)  
Lab 07

## **Simulation**

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## Circuit design

