

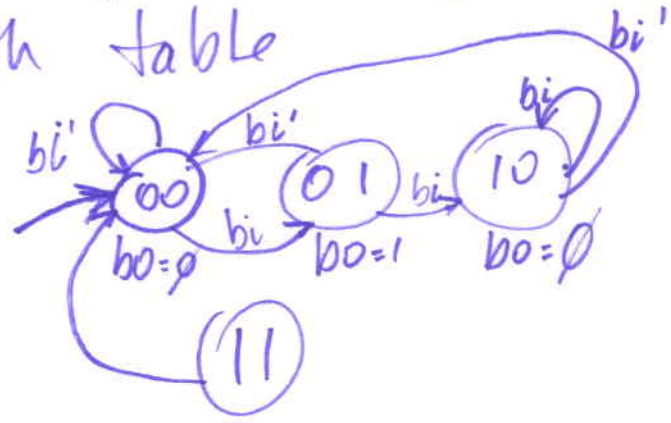
Digital logic

2015-11-10

(1)

Looking at the slide (Value 3-47)
Show the truth table

SI	SO	bi	n1	no	bo
0	0	0	0	0	0
0	0	1	0	1	0
0	1	0	0	0	1
0	1	1	1	0	1
1	0	0	0	0	0
1	0	1	1	0	0
1	1	0	0	0	0
1	1	1	0	0	0



$bo = SI'SO$
 $n1 = SI'SObi + SI'SO'bi$
 $no = SI'SO'bi$

n1

SI	SO	bi	n1
0	0	0	0
0	0	1	0
0	1	0	1
0	1	1	1
1	0	0	0
1	0	1	1
1	1	0	0
1	1	1	0

bo
n1 =

SI	SO	bi	bo	n1	no
0	0	0	0	0	0
0	0	1	0	0	1
0	1	0	1	0	0
0	1	1	1	1	0
1	0	0	0	0	0
1	0	1	0	1	0
1	1	0	0	0	0
1	1	1	0	0	0

bi	SI	SO	bo	n1	no
0	0	0	0	0	0
0	0	1	phi	0	0
0	1	0	0	0	0
0	1	1	0	0	0
1	0	0	0	0	1
1	0	1	1	phi	0
1	1	0	0	1	0
1	1	1	0	0	0

n1

SI	SO	bi	n1
0	0	0	0
0	0	1	0
0	1	0	1
0	1	1	1
1	0	0	0
1	0	1	1
1	1	0	0
1	1	1	0