# Laborator Proiectare Logică 8

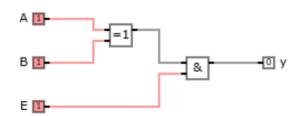
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### Circuite secvențiale



Figure 1: diagrama temporală



$$y = \sum_{\bar{A}} (3,5) = \bar{A}BE + A\bar{B}\bar{E}$$

$$= \bar{E}(\bar{A}B + A\bar{B}) = E(A \bigoplus B)$$

$$A \longrightarrow B$$

$$E \longrightarrow A \bigoplus B$$

$$y \longrightarrow f$$

Figure 2: diagrama temporală

A	В	Ε	$A \bigoplus B$	у
0	0	0	0	0
0	0	1	0	0
0	1	0	1	0
0	1	1	1	1
1	0	0	1	0
1	0	1	1	1
1	1	0	0	0
1	1	1	0	0

### Detector de front pozitiv

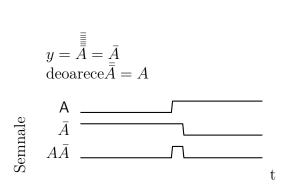
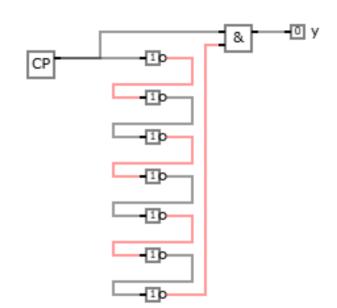
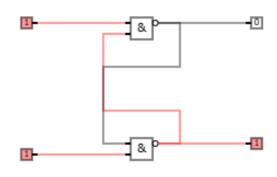


Figure 3: Detector de front pozitiv



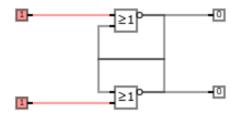
## Detector de front negativ

#### SR-NAND

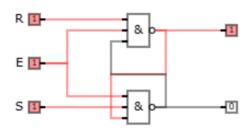


A	S	Q	$ar{Q}$
0	0	0	0
0	1	0	1
1	0	1	0
1	1	(1 Q 0)	$(0 \bar{Q} 1)$

#### SR-NOR



A	S	Q	$ar{Q}$	
0	0	(1 Q 0)	$(0 \bar{Q} 1)$	
0	1	1	0	
1	0	0	1	
1	1	0	0	



Ε	R	S	Q	$\bar{Q}$
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	0
1	1	0	0	1
1	1	1	Q	$\bar{Q}$