8. Domača naloga

$D^{-1}_Q = f_{\{0,1,3\}}(x_1, \bar{x}_2, \bar{x}_3, \bar{Q})$

$D^{-1}_Q = Q\cdot\bar{t} \vee \bar{Q}\cdot t$

x_1	x_2	x_3	Q	x_1	$\bar{x}_2$	$\bar{x}_3$	$\bar{Q}$	$f_{\{0,1,3\}}(x_1, \bar{x}_2, \bar{x}_3, \bar{Q})$	t
0	0	0	0	0	1	1	1	$1 \sim \bar{Q}$	1
0	0	0	1	0	1	1	0	$0 \sim Q$	1
0	0	1	0	0	1	0	1	$0 \sim Q$	0
0	0	1	1	0	1	0	0	$1 \sim Q$	0
0	1	0	0	0	0	1	1	$0 \sim Q$	0
0	1	0	1	0	0	1	0	$1 \sim Q$	0
0	1	1	0	0	0	0	1	$1 \sim \bar{Q}$	1
0	1	1	1	0	0	0	0	$1 \sim Q$	0
1	0	0	0	1	1	1	1	$0 \sim Q$	0
1	0	0	1	1	1	1	0	$1 \sim Q$	0
1	0	1	0	1	1	0	1	$1 \sim \bar{Q}$	1
1	0	1	1	1	1	0	0	$0 \sim Q$	1
1	1	0	0	1	0	1	1	$1 \sim \bar{Q}$	1
1	1	0	1	1	0	1	0	$0 \sim Q$	1
1	1	1	0	1	0	0	1	$0 \sim Q$	0
1	1	1	1	1	0	0	0	$1 \sim Q$	0

$t(x_1, x_2, x_3, Q) = \bar{x}_1\bar{x}_2\bar{x}_3 \vee x_1\bar{x}_2x_3 \vee x_1x_2\bar{x}_3 \vee \bar{x}_1x_2x_3\bar{Q}$

$t_0(x_2, x_3, Q) = \bar{x}_2\bar{x}_3 \vee x_2x_3\bar{Q}$

$t_{00}(x_3, Q) = \bar{x}_3$

$t_{01}(x_3, Q) = x_3\bar{Q}$

$t_{010}(Q) = 0$

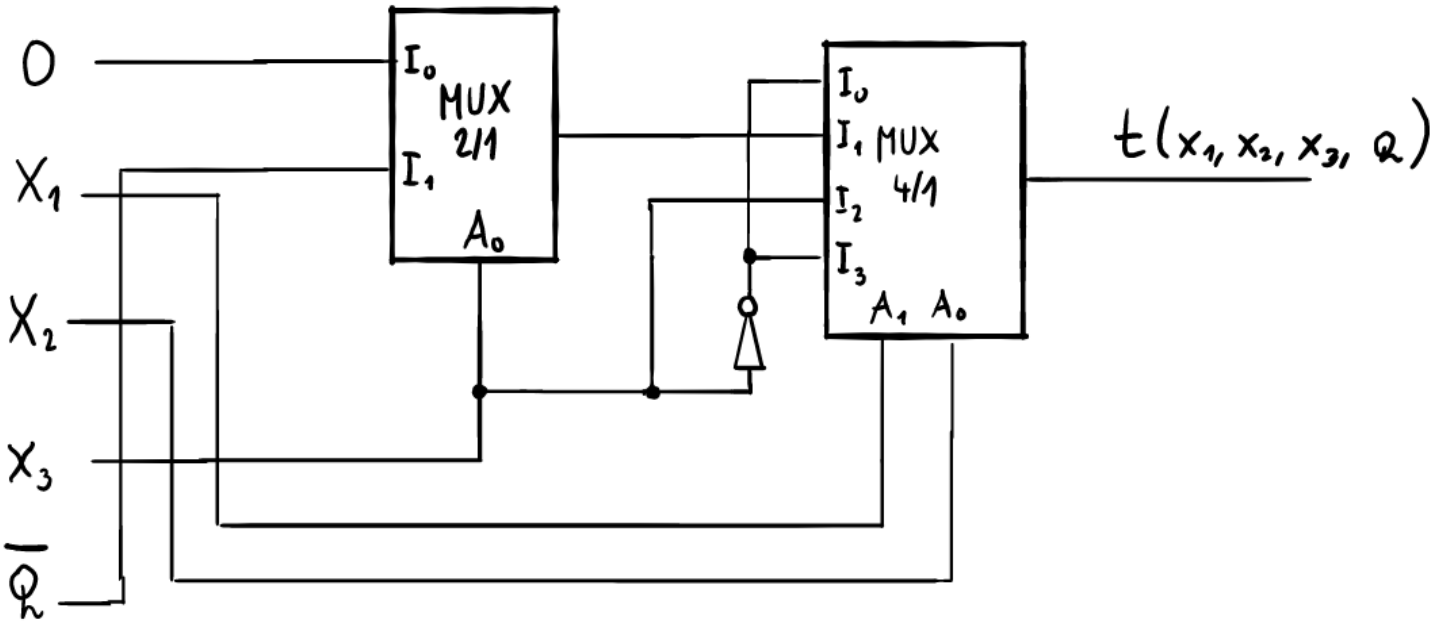
$t_{011}(Q) = \bar{Q}$

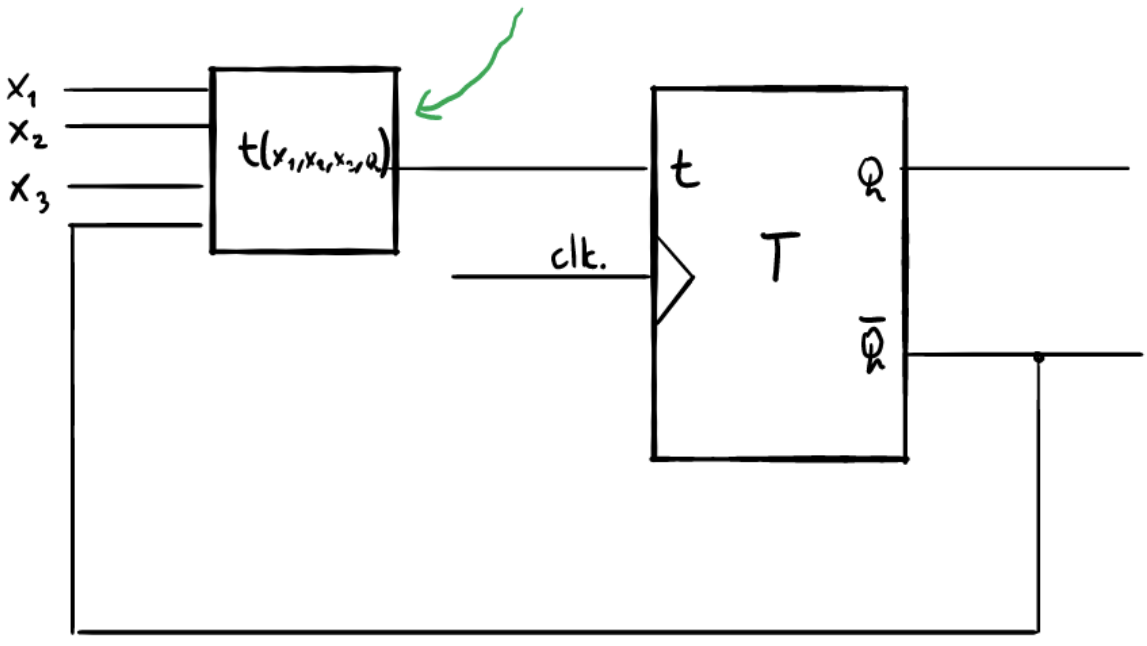
$t_1(x_2, x_3, Q) = \bar{x}_2x_3 \vee x_2\bar{x}_3$

$t_{10}(x_3, Q) = x_3$

$t_{11}(x_3, Q) = \bar{x}_3$

Shema:


0
X1
X2
X3
Q̄h
I0
I1
MUX
2/1
A0
I0
I1
I2
I3
MUX
4/1
A1 A0
t(x1, x2, x3, Q)


X1
X2
X3
t(x1,x2,x3,Q)
t
clk.
T
Q
Q̄

Realizacijo v Logisimu