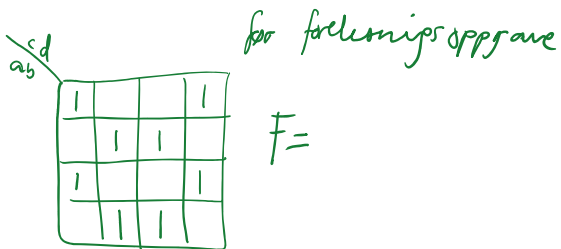
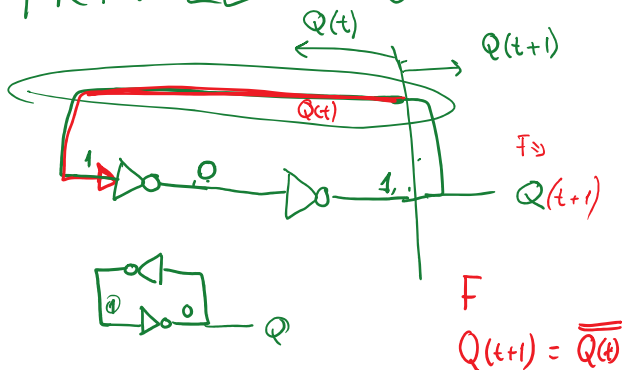


Forelsning 07 - Notater

onsdag 5. oktober 2016 12.00



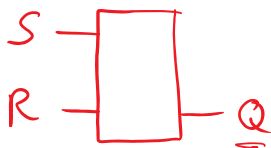
FRIVILLIG 😊



SR-latch.

1) $Q=1$ hvis $S=1$

\downarrow
0
 $Q=1$

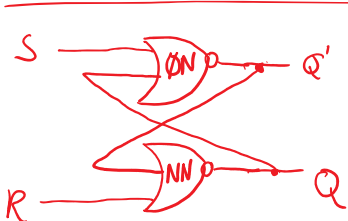


2) $Q=0$ hvis $R=1$

\downarrow
0
 $Q=0$

3) $R=S=1$ skal ikke forekomme

S	R	Q
0	0	lært
0	1	0
1	0	1
1	1	



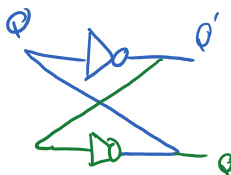
a/b	NOR
00	1
01	0
10	0
11	0

S	R	Q
0	0	lært
0	1	0
1	0	1
1	1	

ΦV

S	Q	Q'
0	0	1
0	1	0
1	0	1
1	1	0

Nederst



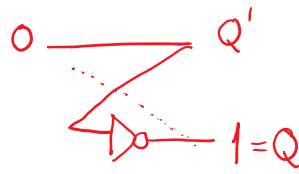
$S=1 \quad R=0$

ORCE NOR

S	Q	
0	0	1
0	1	0
1	0	0
1	1	0

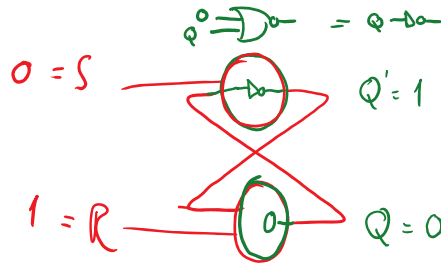
NOR NOR

R	Q'	
0	0	1
0	1	0
1	0	0
1	1	0



ON

S	Q	
0	0	1
0	1	0
1	0	0
1	1	0

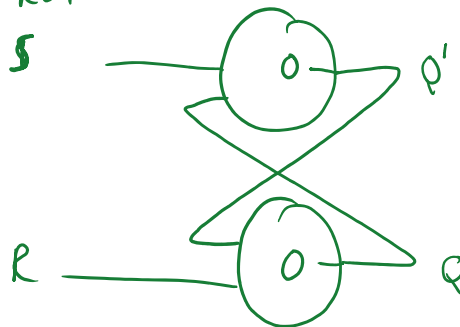


NN

R	Q	
0	0	1
0	1	0
1	0	0
1	1	0

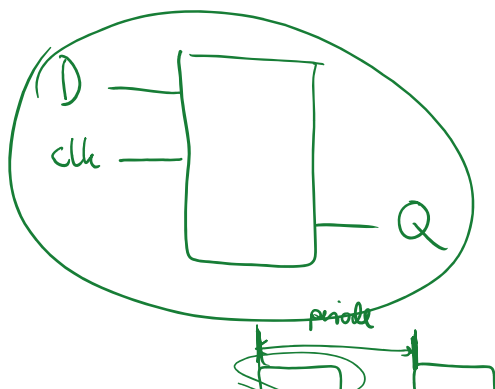
$S=1 \quad R=1$

S	Q	
0	0	1
0	1	0
1	0	0
1	1	0

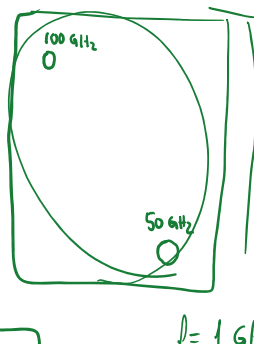


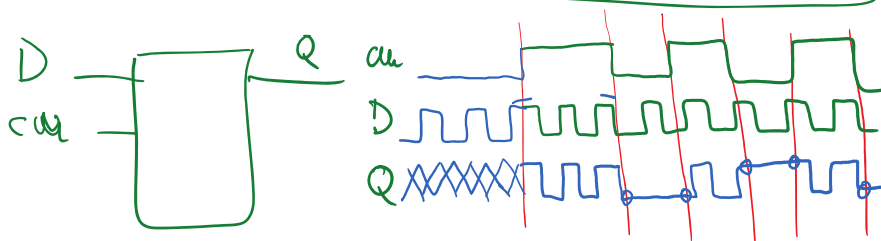
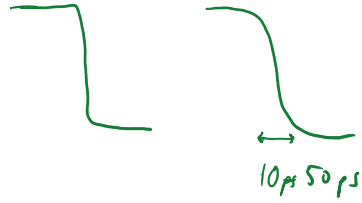
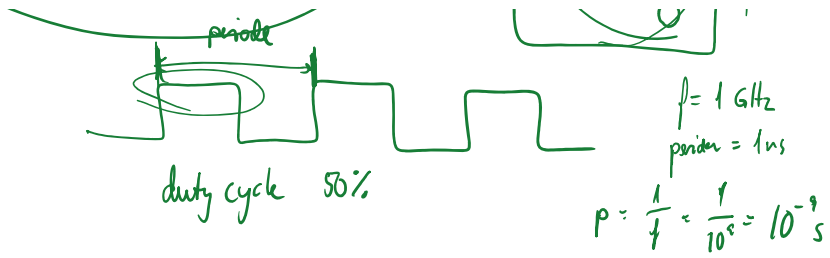
R	Q	
0	0	1
0	1	0
1	0	0
1	1	0

S'R' - latch

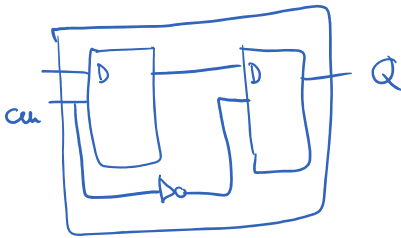


CPU 1 GHz

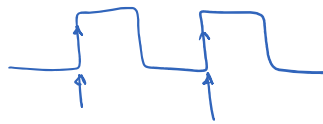
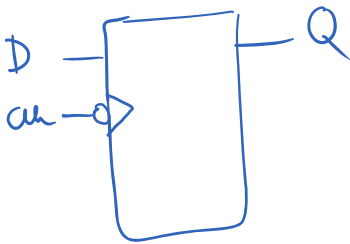




D-FF

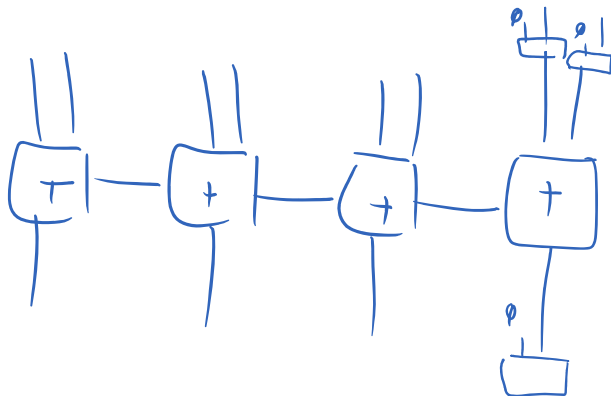


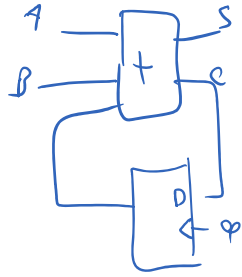
D-FF



➤ Positiv flankgetriggert

➤ Negativ flankgetriggert

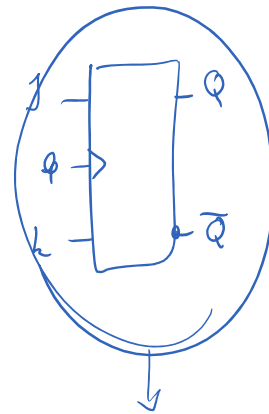




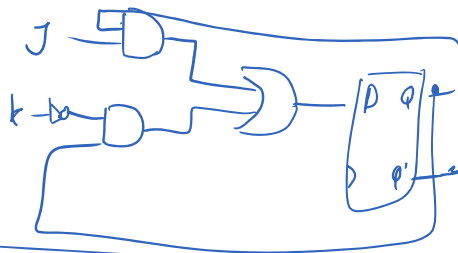
D	Q(t+1)
0	0
1	1

Jk - FF

- $J = k = 0$ lärt
- $\rightarrow J = 0$ og $k = 1$ Resetter utgangen til '0'
- $\rightarrow J = 1$ og $k = 0$ Setter utg til '1'
- $\rightarrow J = 1$ og $k = 1$ Invert $Q \rightarrow \bar{Q}$



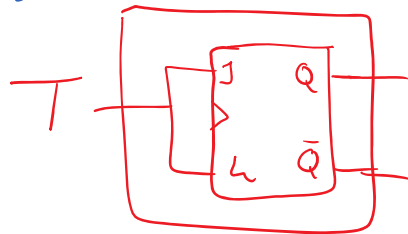
J	k	Q(t+1)
0	0	Q(t)
0	1	0
1	0	1
1	1	$\overline{Q(t)}$



T = FF

- $T = 0$ læser
- $T = 1$ Inverter utgangen

T	Q(t+1)
0	Q(t)
1	$\overline{Q(t)}$



T	Q(t+1)
0	Q(t)
1	$\overline{Q(t)}$

