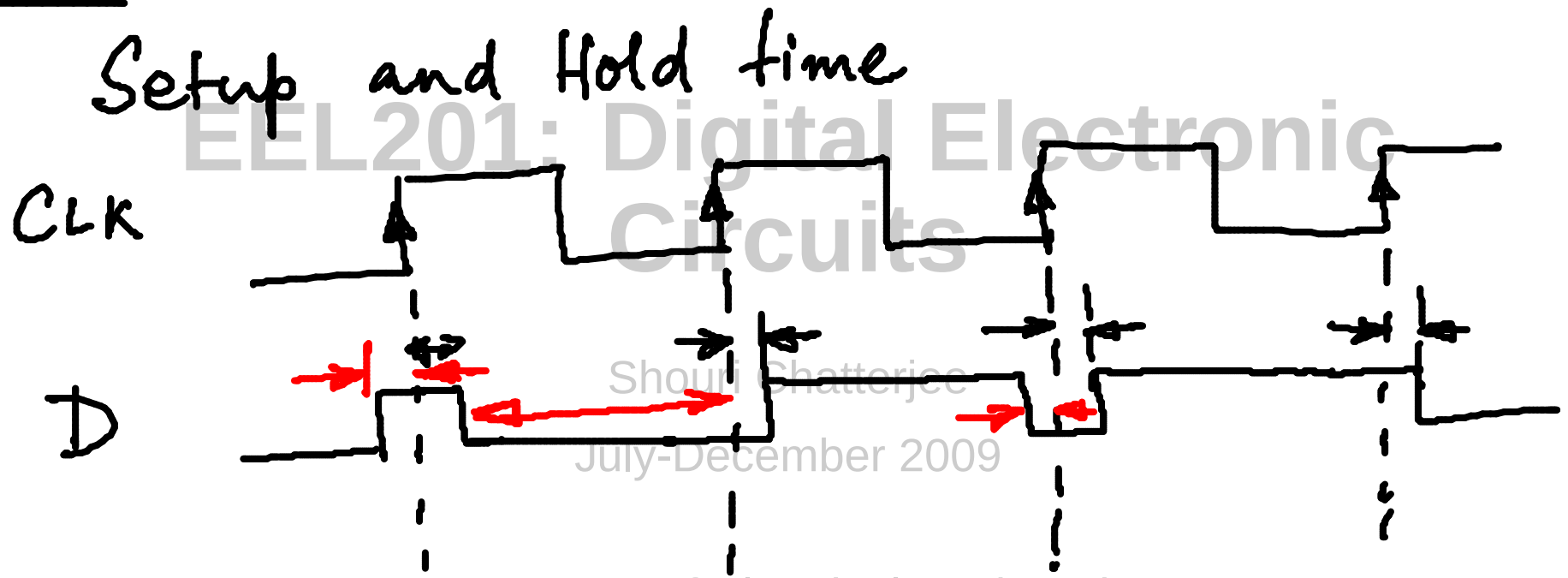
Recap

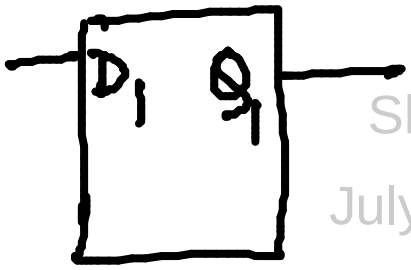
Setup and Hold time

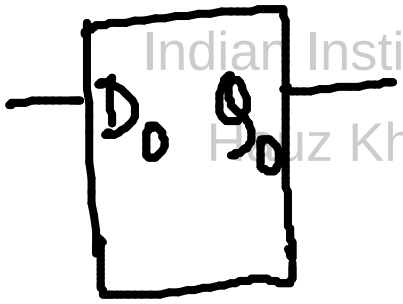


Modulo - 4 Counter

3 states

$\log_2 4$ f/fs $= 2$ f/fs.





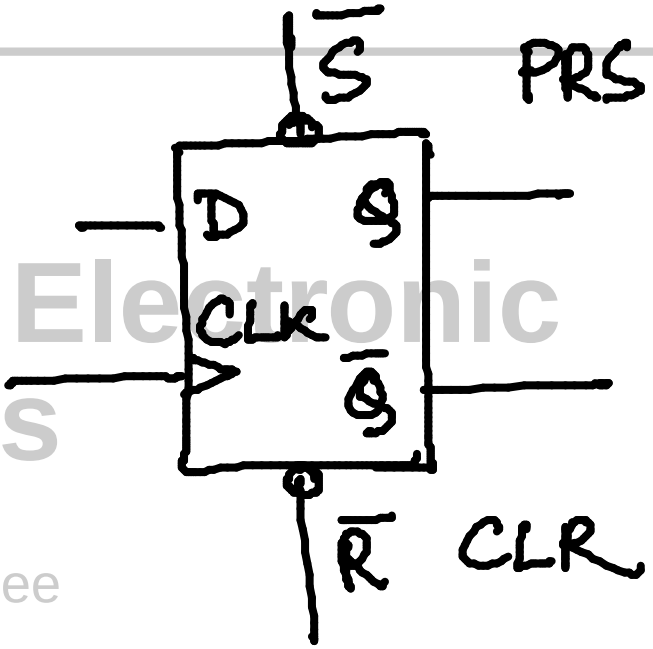
$Q_1 Q_0$	$D_1 D_0$
0 0	0 1
0 1	1 0
1 0	0 0
1 1	X X

$D_1 = Q_0$ $\quad D_0 = \overline{Q_1}\,\overline{Q_0}$

Initializing f/f s

Clear ⟷ Reset

Pre-set ⟷ Set



"Asynchronous" clear and preset

Power-On Reset

Not easy

Finite State Machine (FSM)

Turing Machine → infinite states

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State diagram

"1101"