

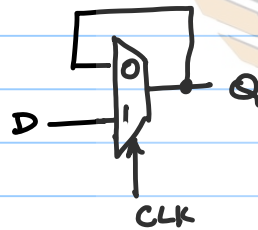
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EES311

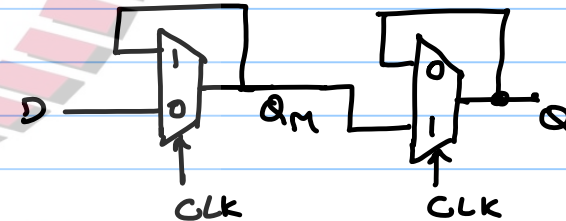
MODULE - 5 - SEQUENTIAL CIRCUITS

LATCH  $\rightarrow$  LEVEL SENSITIVE (tve)  $\rightarrow$   
FLOP  $\rightarrow$  EDGE TRIG.

IF  $CLK == 1$   $Q = D$ ;  
else  $Q_{n+1} = Q_n$ ;

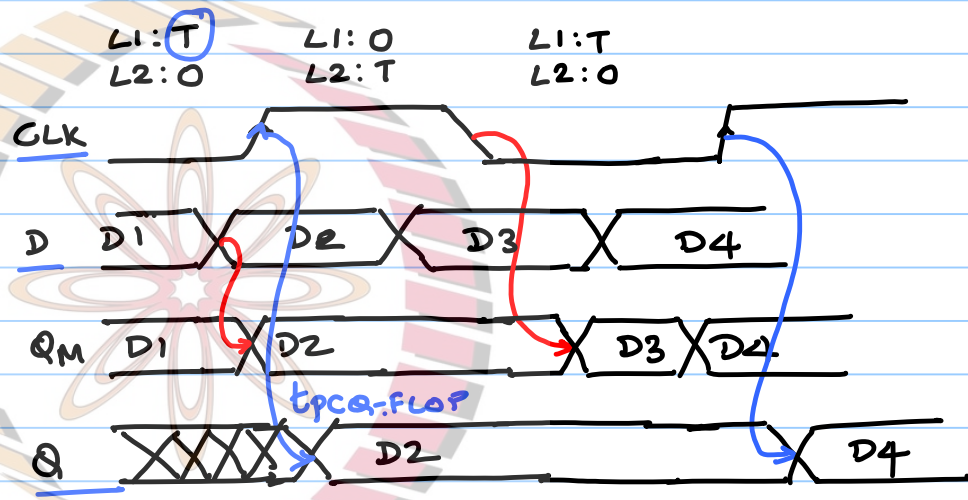
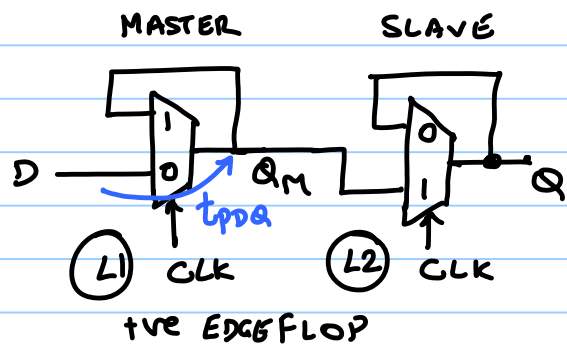


tve LATCH



tve EDGE FLOP

NPTEL

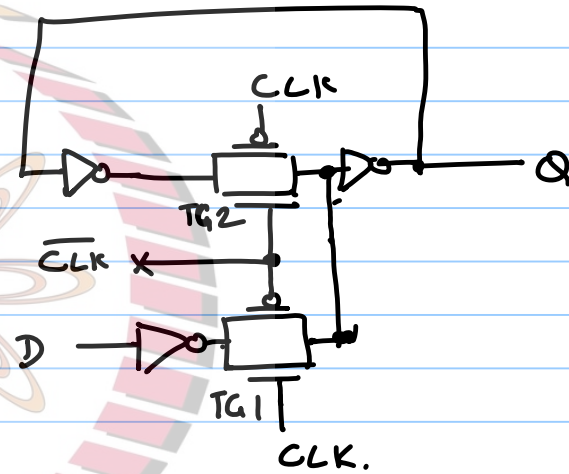
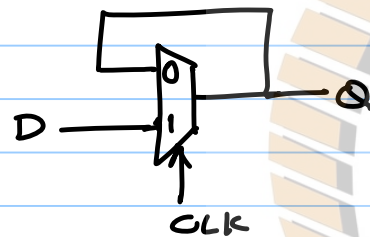


$$t_{PCQ-FLOP} = t_{PCQ-L2}$$

$$t_{SETUP-FLOP} = t_{SETUP-L1}$$

NPTTEL

## CIRCUIT IMPLEMENTATION



NPTEL