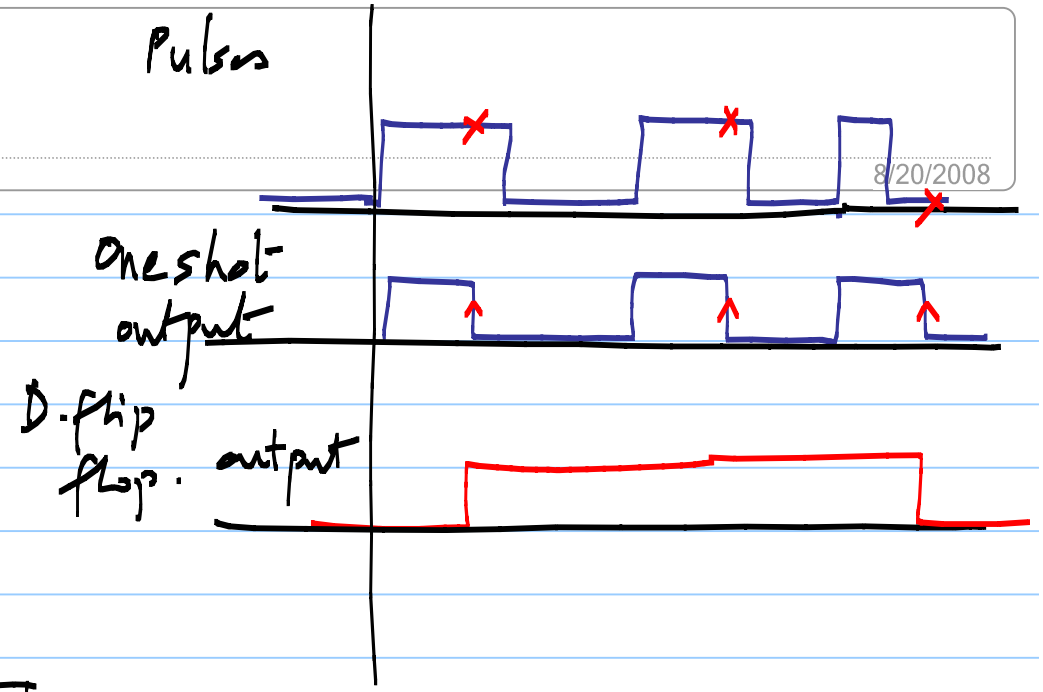
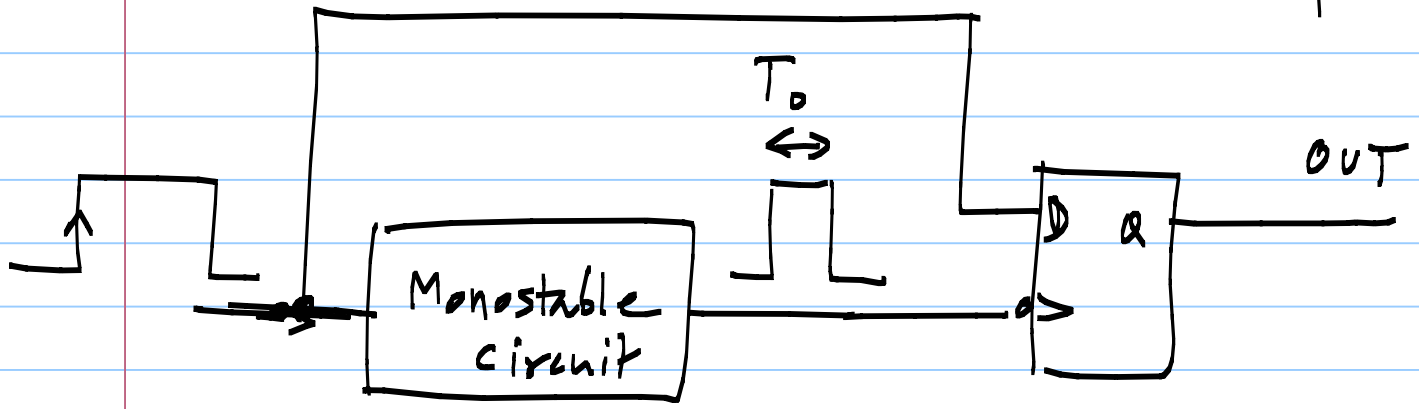
Pulse width to logic

Note Title 8/20/2008

$T_{low} < T_D < T_{high}$

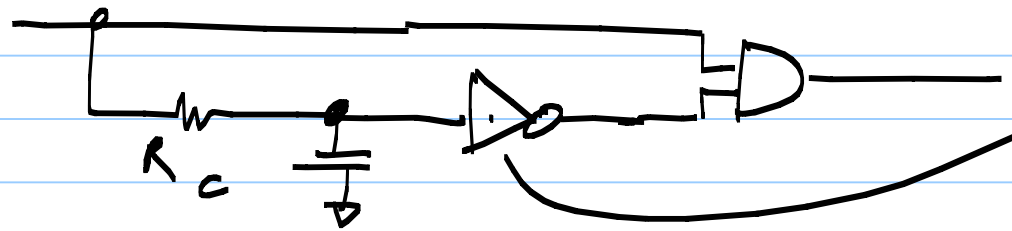




Principle:

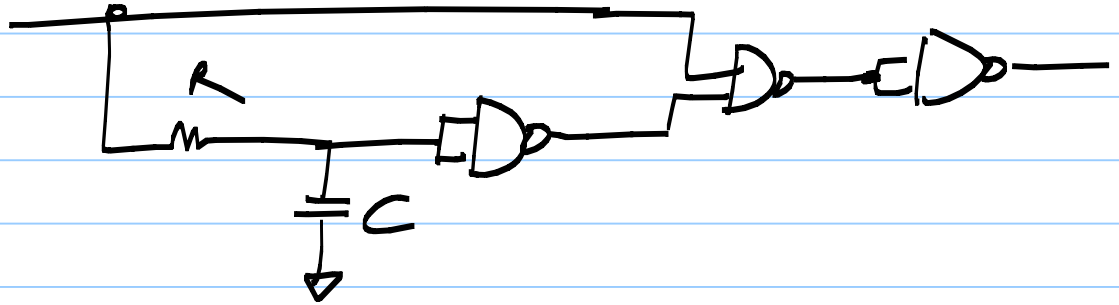
* On the rising edge of the input pulse, trigger a one-shot of width T_0
* On the falling edge of the one shot output, latch the input. This will be zero if the i/p lasts less than T_0 & one otherwise

One shot implementation: * Adjust RC to get the right T_o.



* Schmitt trigger may be necessary

Without schmitt trigger: Single NAND IC will do.



Two ICs in total: 1 NAND & 1 Flip flop.

CMOS ICs for low power