



Look at the debounce.vhd

We have a 50 MHz clock \rightarrow $\overset{20\text{ ns}}{\text{period}}$ is 20 nsec \rightarrow

20 bits $\rightarrow 2^{20} = 1,048,576$

0.0200 sec = $2^{20} * .00000002 \text{ sec}$

21 msec

ECGR 2181 - Extra Notes - 11/23/09

(2)

$$r = s_2's_1's_0 + s_2's_1s_0' + s_2s_1's_0'$$

	s ₂ s ₁			
	00	01	11	10
s ₀ r	00	1		1
	01	1		1
	11	1		
	10	1		

Can't minimize

$$K_2 = s_2's_1's_0$$

$$K_1 = s_2's_1's_0 + s_2's_1s_0'$$

$$K_0 = s_2's_1s_0 + s_2's_0'r$$

	s ₂ s ₁			
	00	01	11	10
s ₀ r	00	1		
	01	1		
	11			
	10			

