

| Ali Tahir | Sec B | 2023-EE-062 |

1. LED does not glow. Voltage at terminal B = 0 V

2. LED does glow. Voltage at terminal B = 1.96 V

3. At 1KHz:

High-Low = 2.4 boxes * 500ns/box = 1.2 μ s

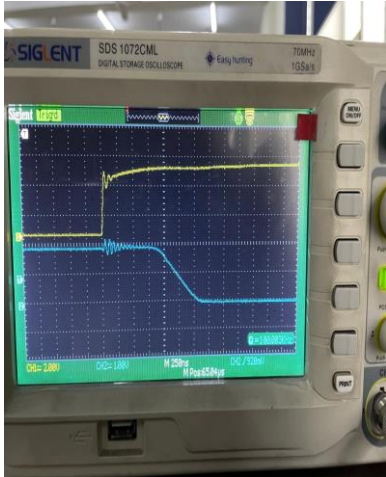
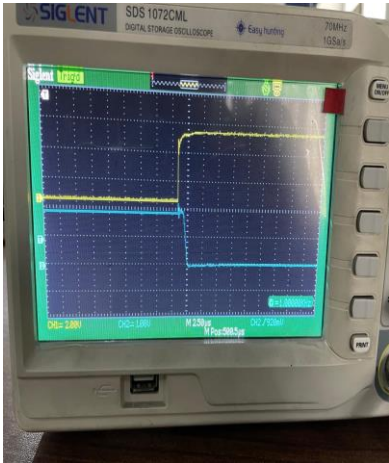
Low-High = 0.6 boxes * 2.5 μ s/box = 1.5 ms

4. At 100KHz:

High-Low = 4.6 boxes * 250ns = 1.15 μ s

Low-High = 6.2 boxes * 250ns = 1.55 μ s

5. At higher frequencies, we see an increase an increase in noise at the transition. This is due to parasitic capacitances at the pins of the MOSFET. The distortion increases

	100KHz	1Khz
Low-High		
High-Low	