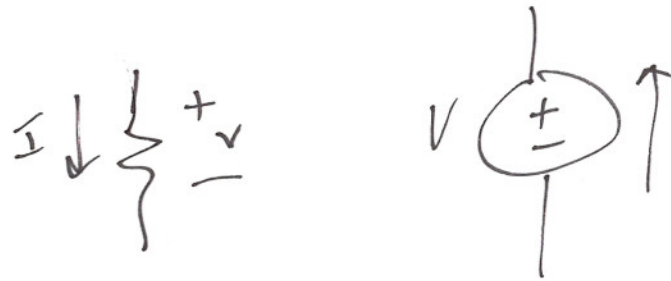
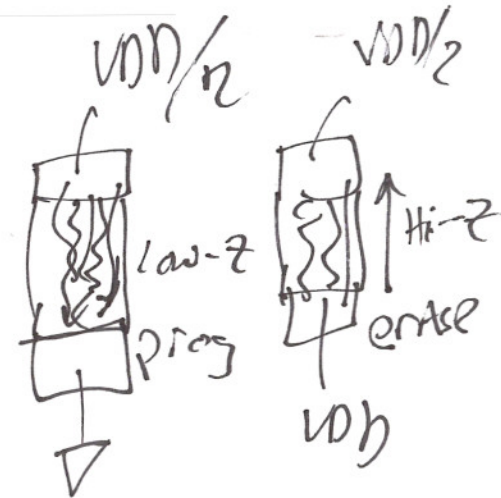
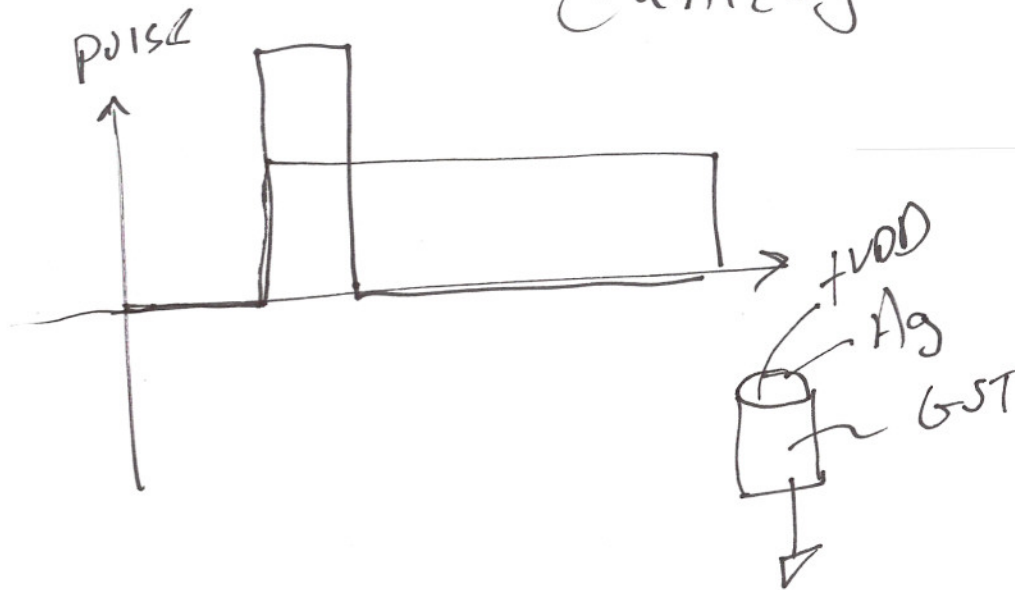


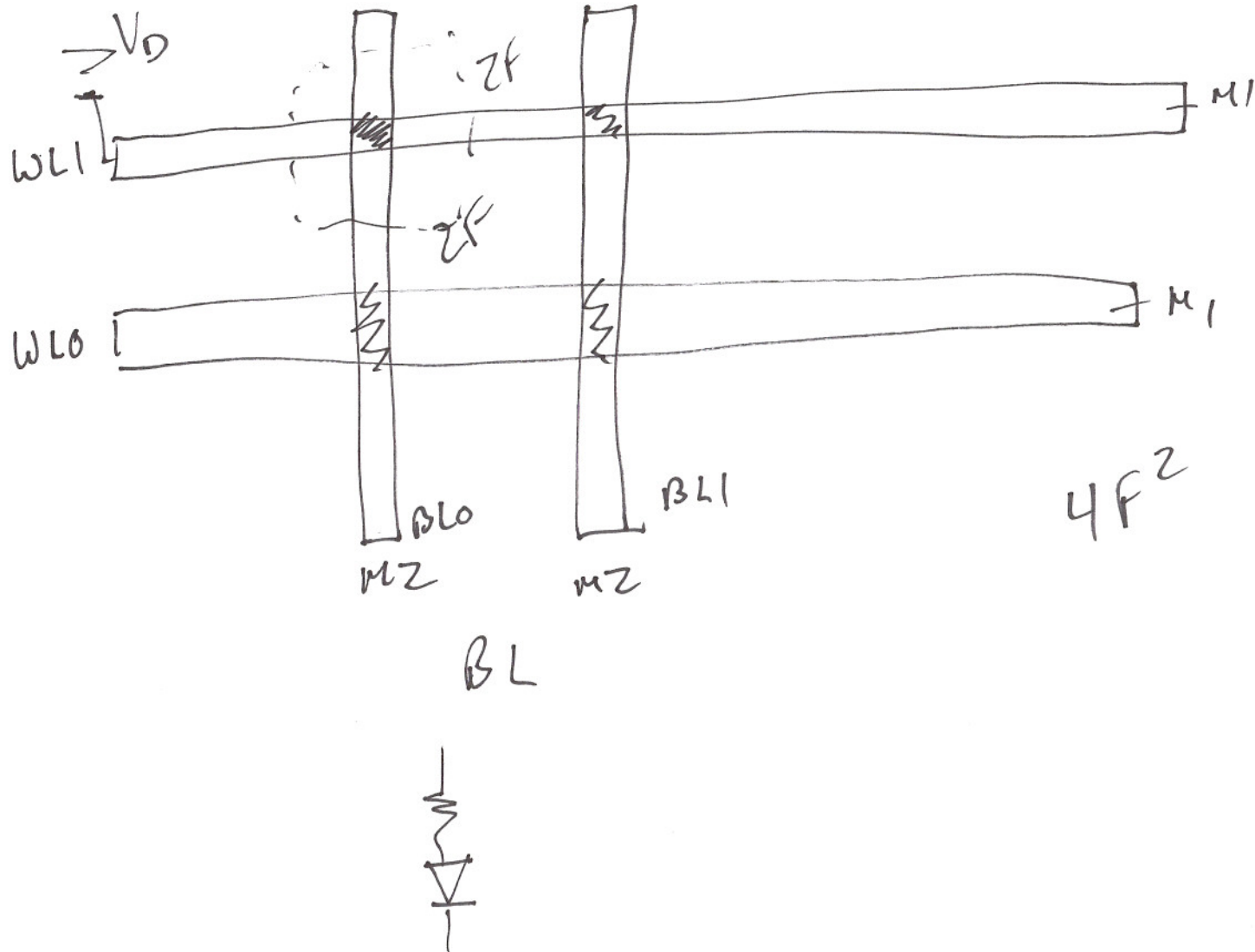
10/27/08



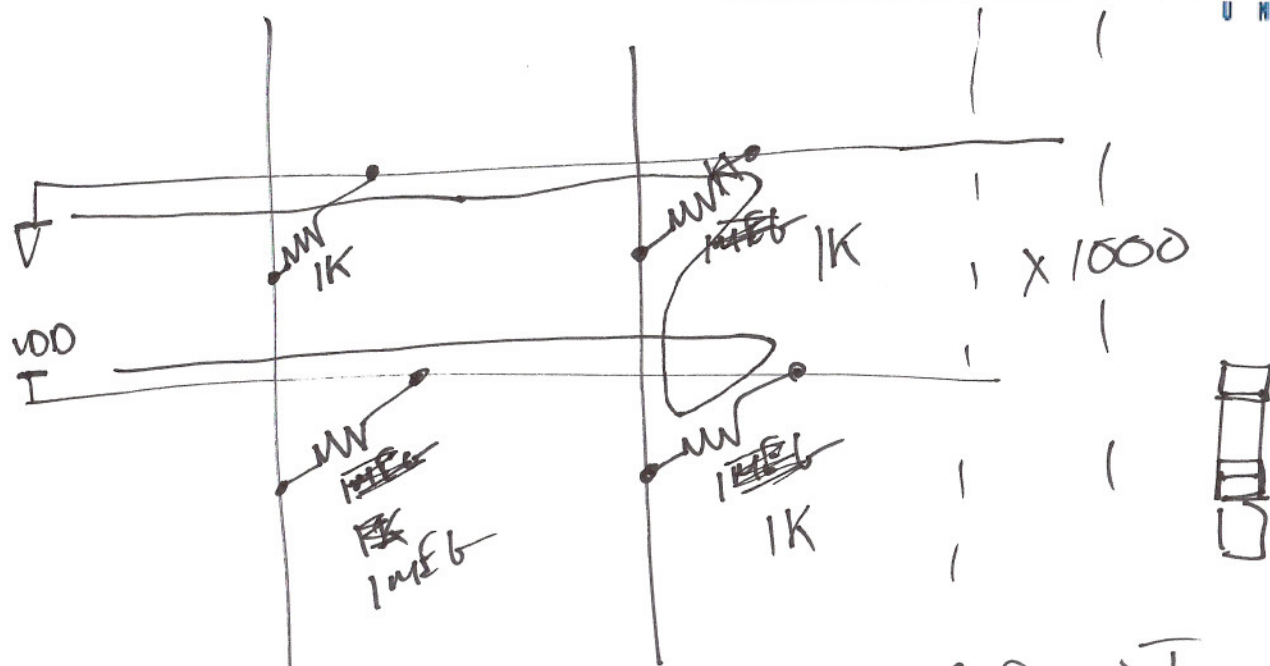
Chalcogenide



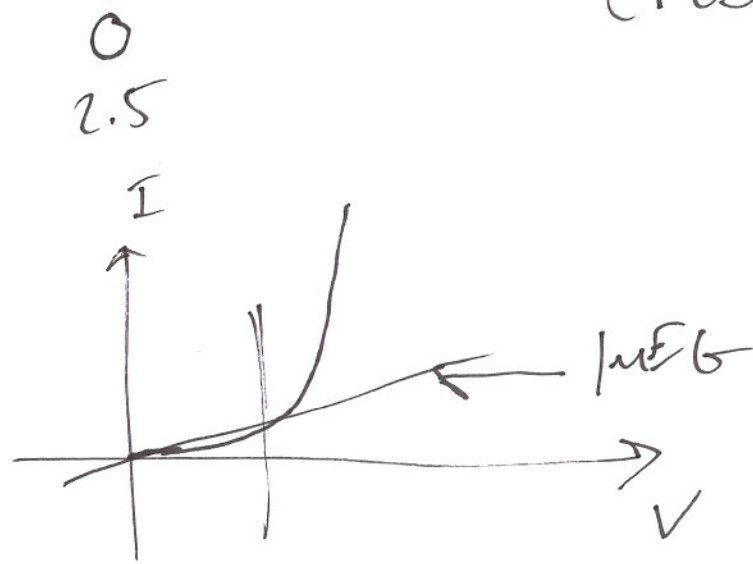
17



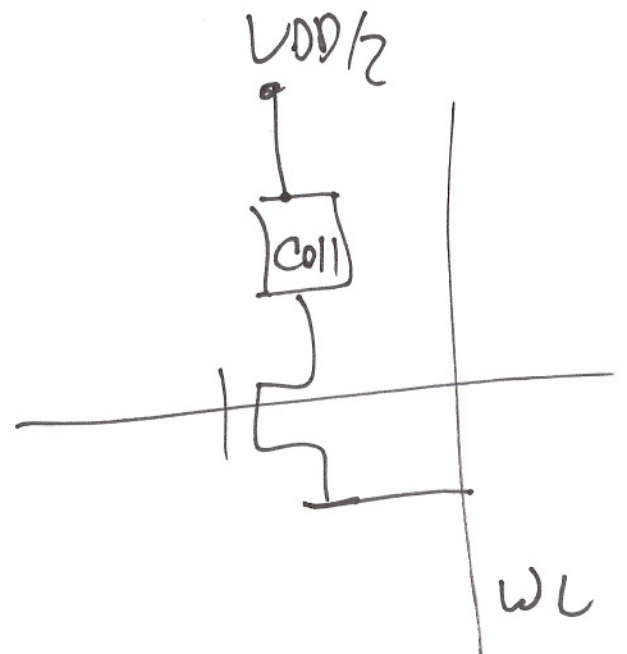
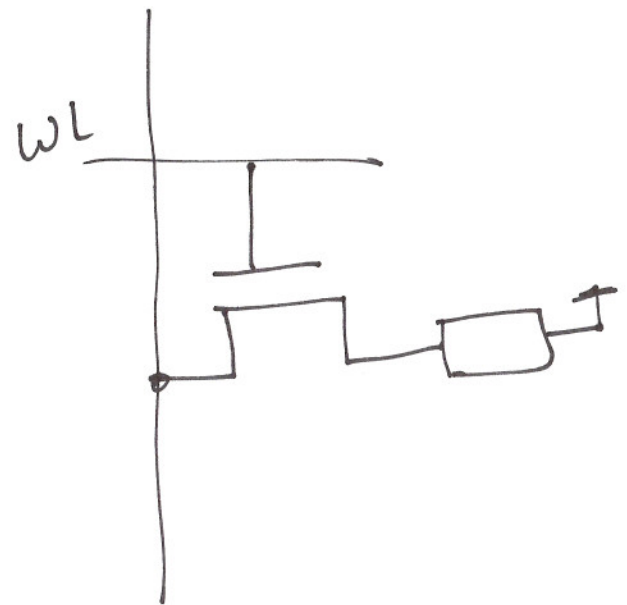
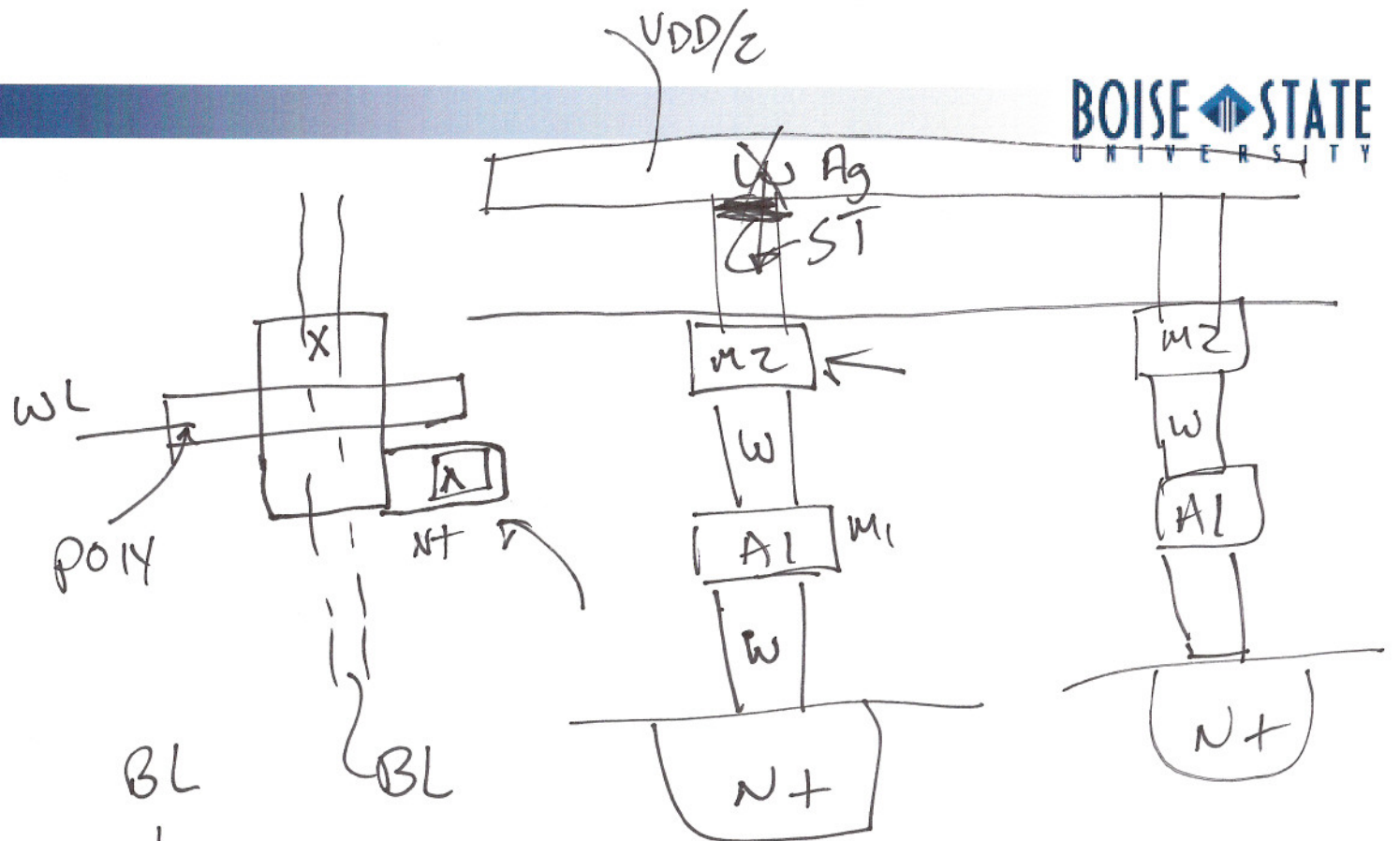
2)



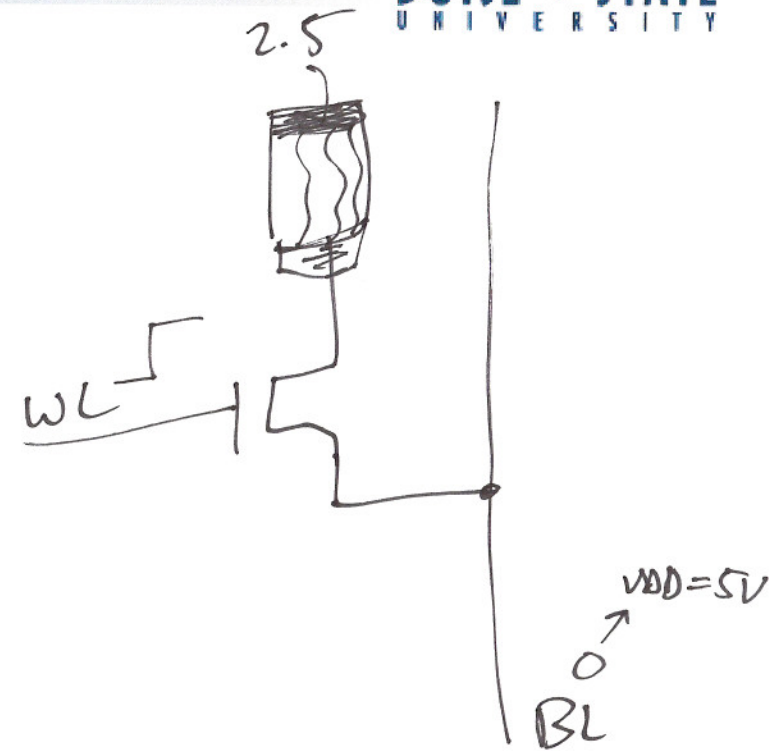
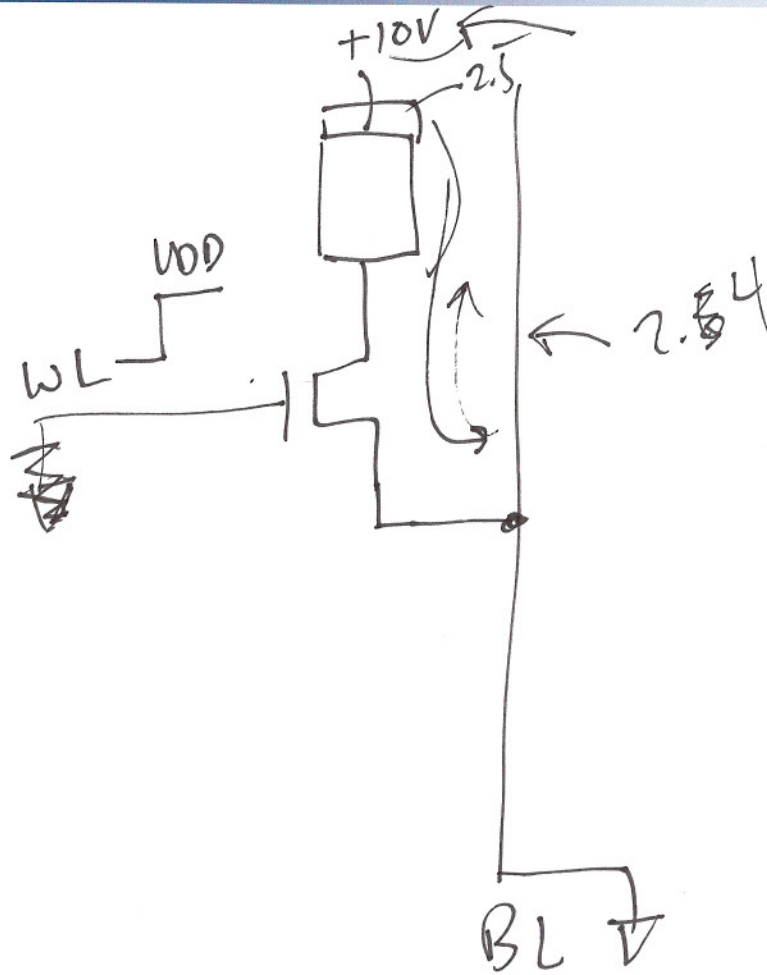
CROSS POINT  
 USING a  
 diode  
 for isolation



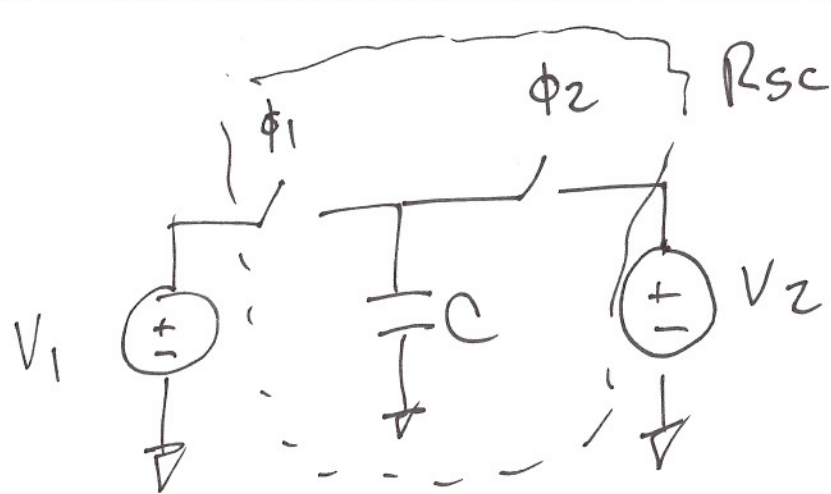
3)



4)



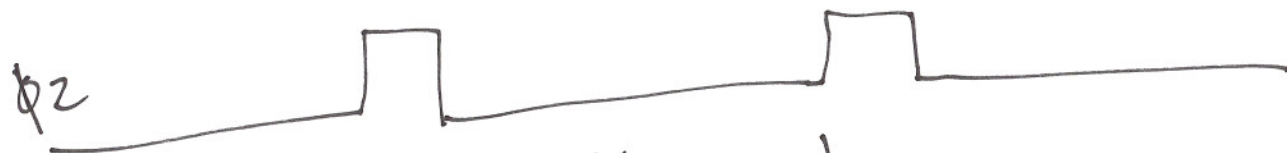
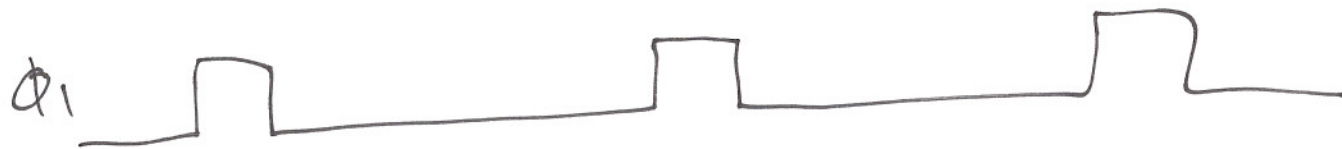
5)



$$I_{avg} = \frac{V_1 - V_2}{R_{sc}}$$

$$CV_1 - CV_2 = Q$$

$$I_{avg} = \frac{CV_1 - CV_2}{T_{clk}}$$

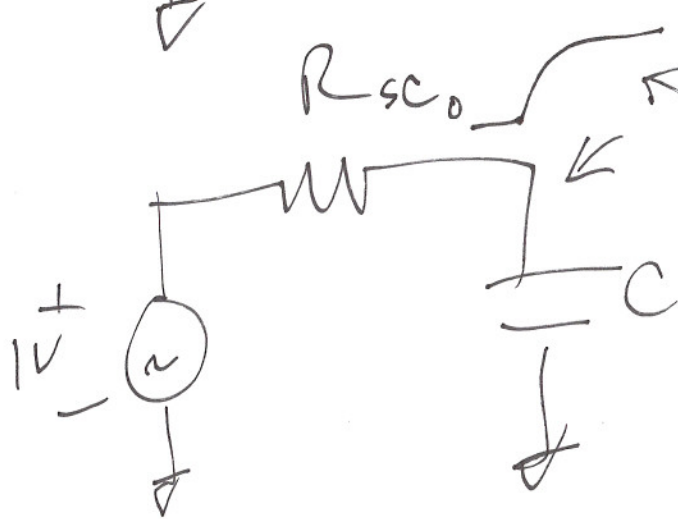
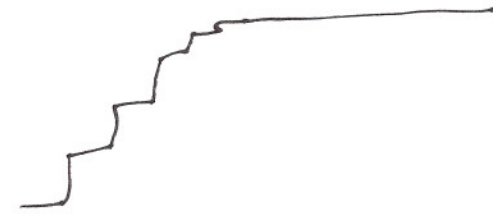
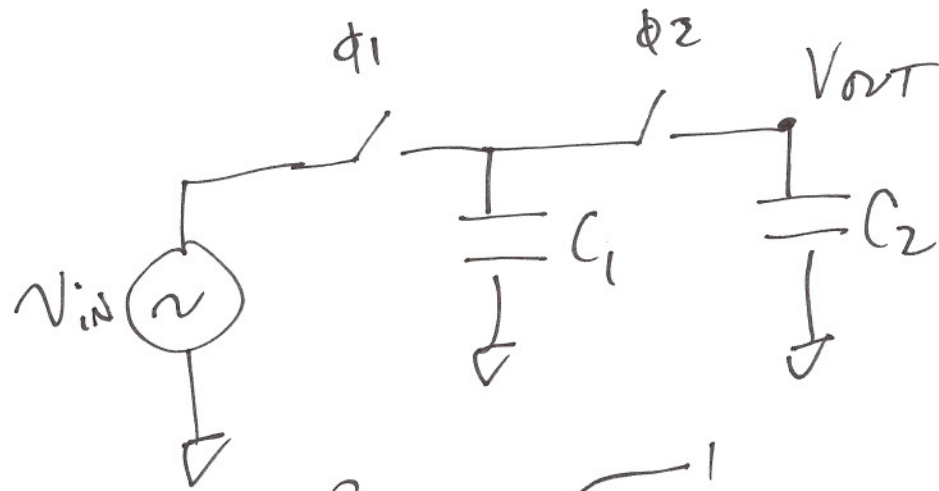


$$T_{clk} = \frac{1}{f_{clk}}$$

$$R_{sc} = \frac{1}{C \cdot f_{clk}}$$

$$I_{avg} = \frac{V_1 - V_2}{\frac{T_{clk}}{C}} = \frac{V_1 - V_2}{\frac{1}{C \cdot f_{clk}}}$$

b)



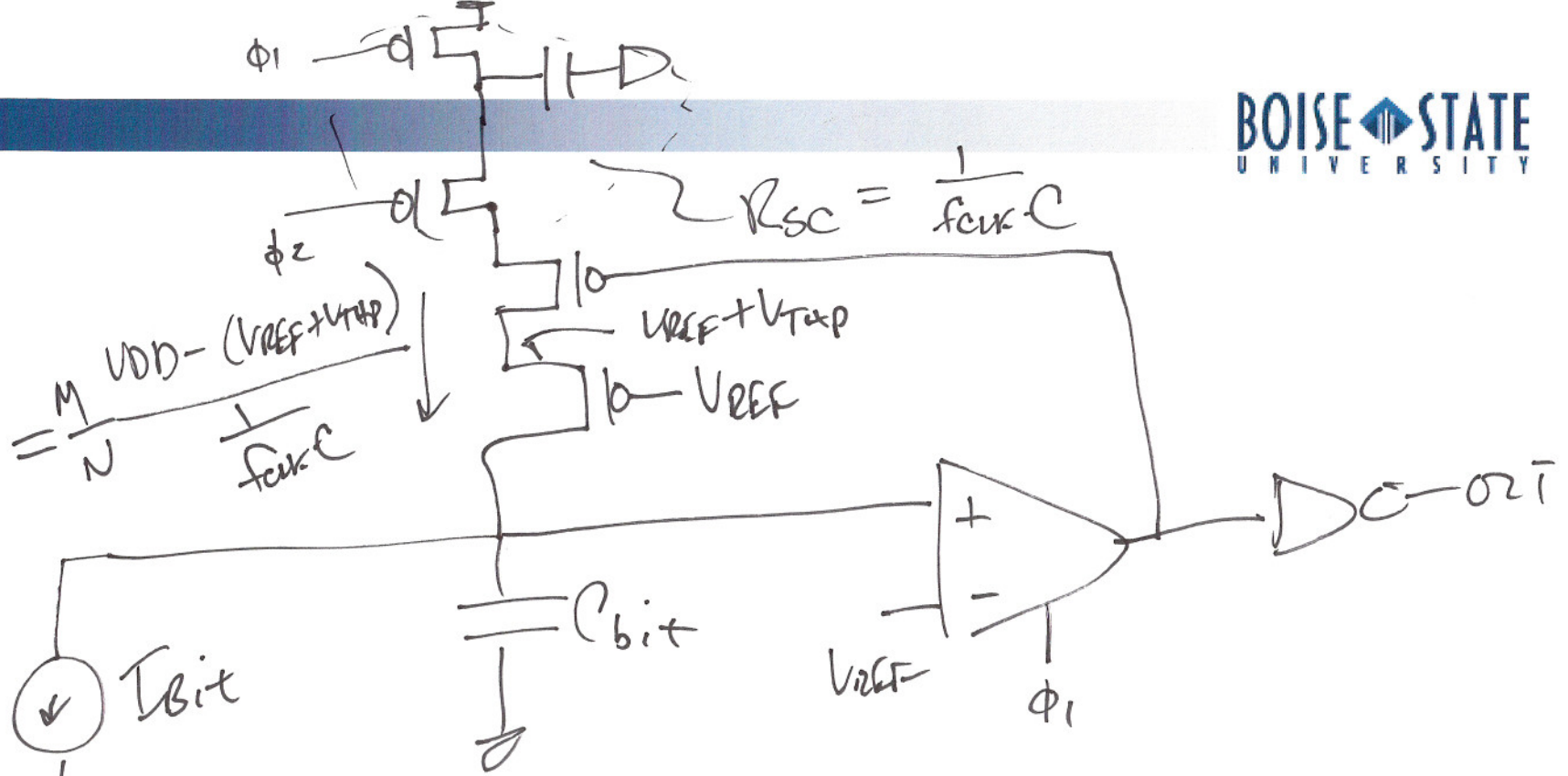
$$V_{OUT} = V_{in} (1 - e^{-t/RC})$$

$$R = \frac{1}{f_{CLK} \cdot C_1}$$

$$V_{OUT} = V_{in} \left( 1 - e^{-t / \left( \frac{C_2}{C_1} \cdot f_{CLK} \right)} \right)$$

↑

$\bar{I}_{Bit}$



$$= \frac{M}{N} \frac{V_{DD} - (V_{REF} + V_{Tn})}{\frac{1}{f_{clk} C}}$$

