

Problem: Place the following in 1D.

$$A=i_0+i_1$$

$$B=i_1+i_2$$

$$C=i_2+i_3$$

$$G=A*B$$

$$H=B*C$$

$$O=G+H$$

Assume i_0, i_1 enter from left side, i_2, i_3 enters from right, and O exits to the right.

What is the:

- Channel Width
- Wire Length
- Squared Wire Length
- Critical Path Length (assuming gates cost unit delay and its costs unit delay to cross each position)