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Lab 2 Report
ECE 2031 L02
05 February 2025
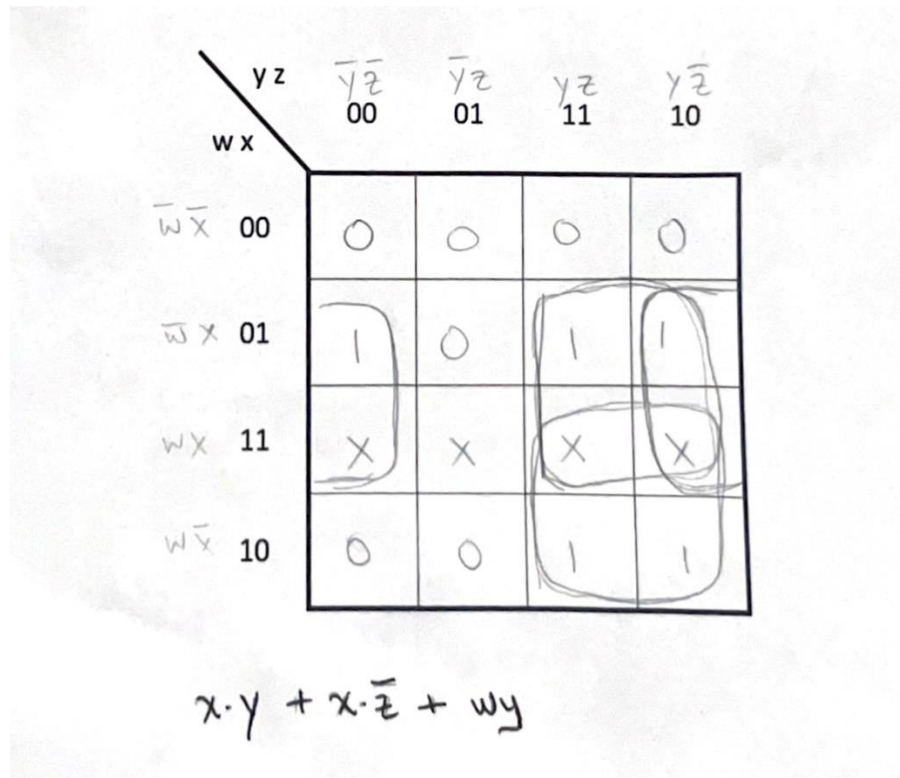
$$x \cdot y + x \cdot \bar{z} + wy$$

Figure 1. Solving for a 4-input KMAP which results in the non-canonical SOP expression
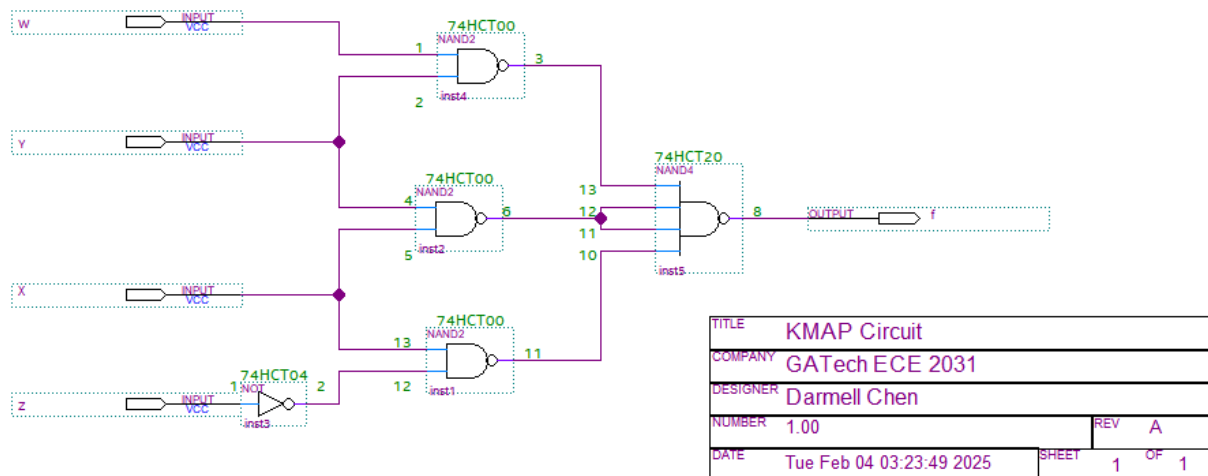$X \cdot Y + X \cdot /Z + W \cdot Y$.

Figure 2. A 4-input circuit schematic that represents the logic equation $f = X \cdot Y + X \cdot /Z + W \cdot Y$.
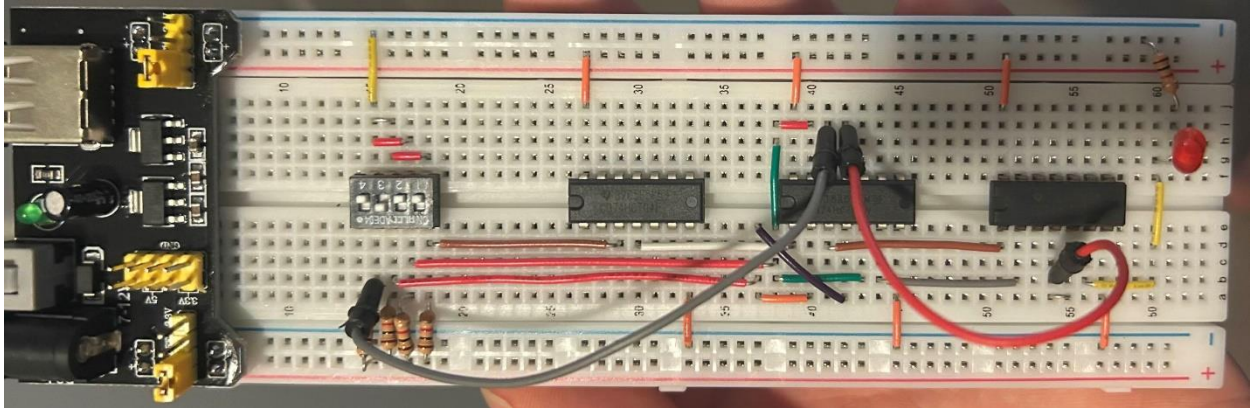
Figure 3. A breadboard circuit that uses a 4-input switch and 3 HCT chips in order to create logical outputs that lights up an LED.
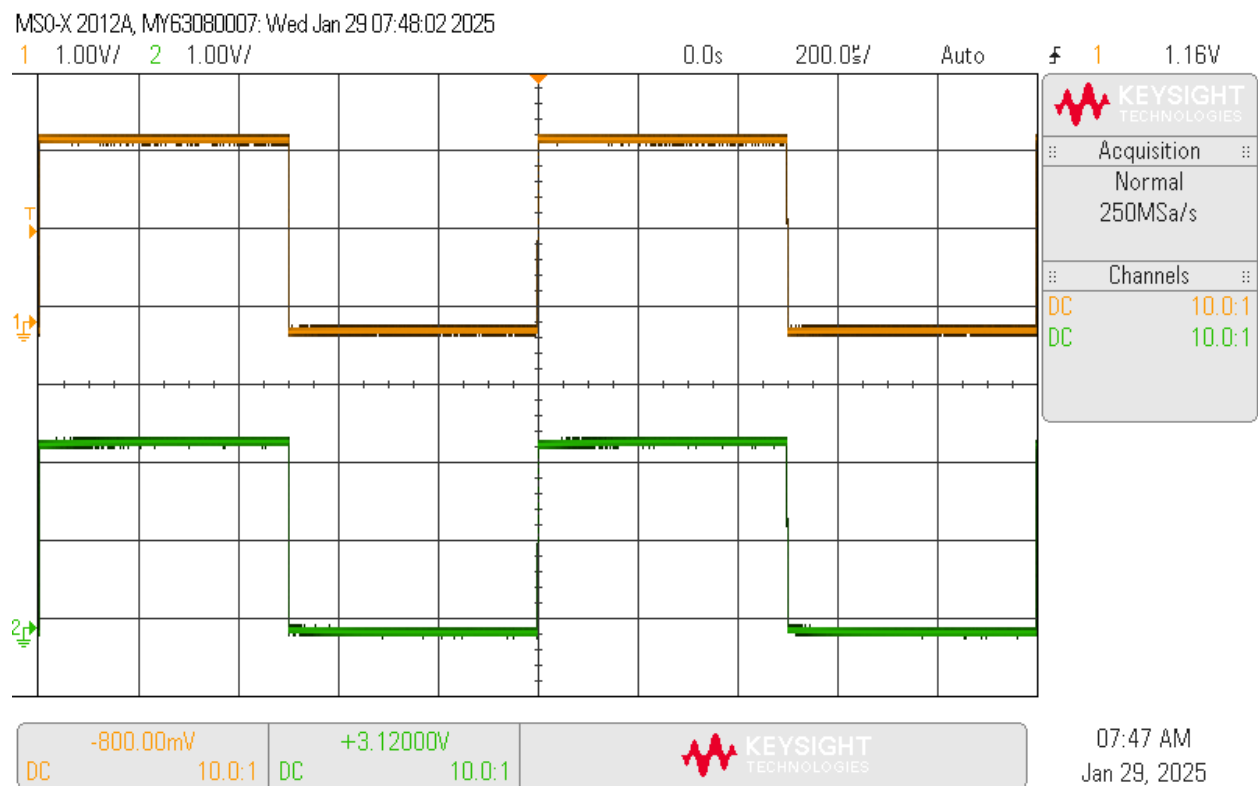

Figure 4. Oscilloscope capture of a square wave on top (channel 1, orange) and a square wave on the bottom (channel 2, green). The signals are generated by attaching both channel's probes to the oscilloscope's test point.