

Evan Varan
lze4
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Lab 04

The screenshots below taken for the lab exercise represent the following. Each number pertains to a screenshot in the order they are shown. Measurements for screenshots 1-2 were taken from a 4-1 MUX. Measurements for screenshots 3-4 were taken from a 3-8 Decoder.

1. The schematic for the 4-1 MUX.
2. The voltage vs. time graph where the teal line represents the output (V_m). The red and blue lines represent the two control inputs (V_{c1} and V_{c2}). The four inputs (V_{x0} , V_{x1} , V_{x2} , and V_{x3}) are respectively represented by the light green line, the pink line, the grey line, and the dark green line.
3. The schematic for the 3-8 decoder.
4. The voltage vs. time graph where the light green, red, and blue lines respectively represent the three inputs (V_a , V_b , and V_c). The eight outputs (V_{d0} , V_{d1} , V_{d2} , V_{d3} , V_{d4} , V_{d5} , V_{d6} , and V_{d7}) are respectively represented by the dark red line, the purple line, the burnt orange line, the dark blue line, the dark green line, the grey line, the pink line, and the teal line.

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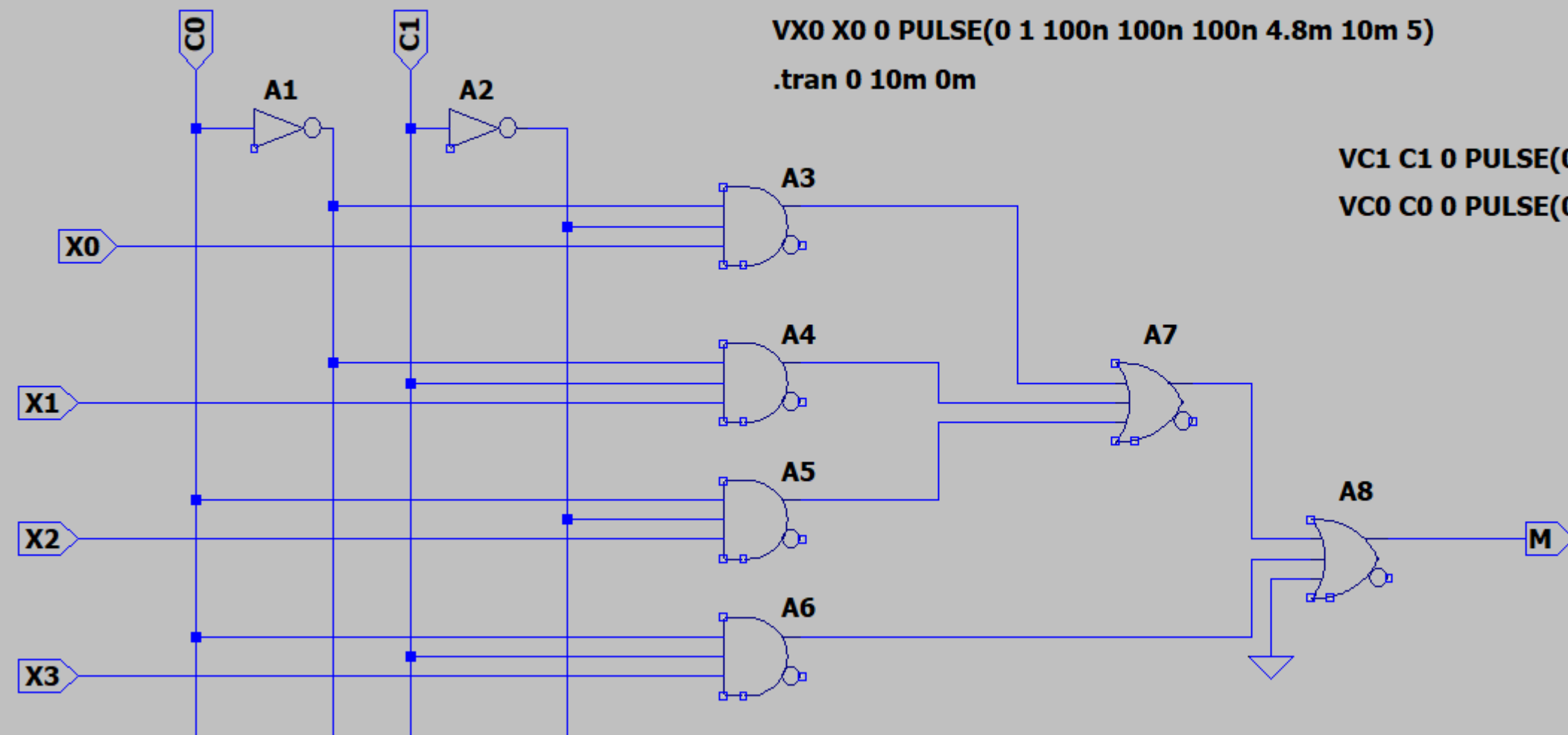
VX3 X3 0 PULSE(0 1 1.5m 100n 100n 4.8m 10m 5)
VX2 X2 0 PULSE(0 1 1m 100n 100n 4.8m 10m 5)
VX1 X1 0 PULSE(0 1 0.5m 100n 100n 4.8m 10m 5)
VX0 X0 0 PULSE(0 1 100n 100n 100n 4.8m 10m 5)
.tran 0 10m 0m

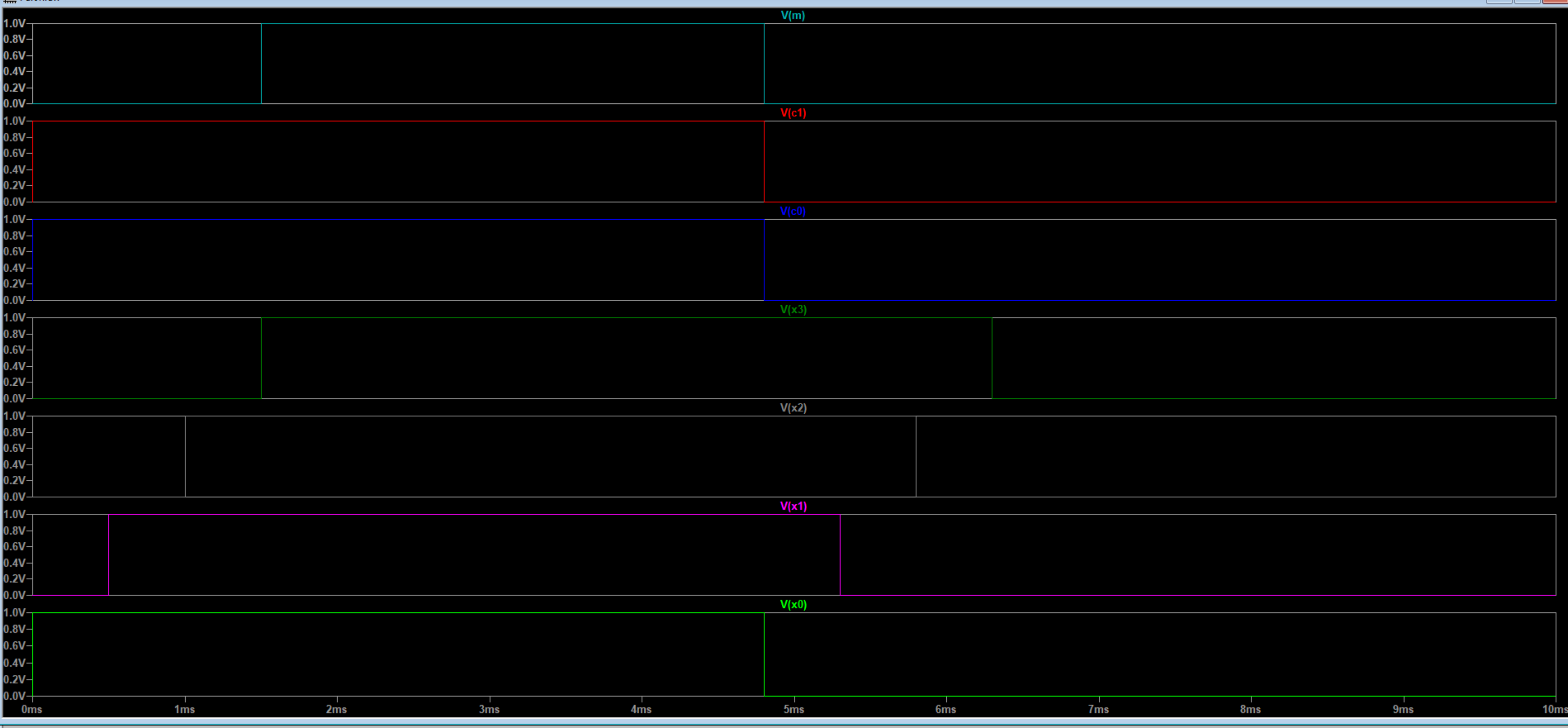
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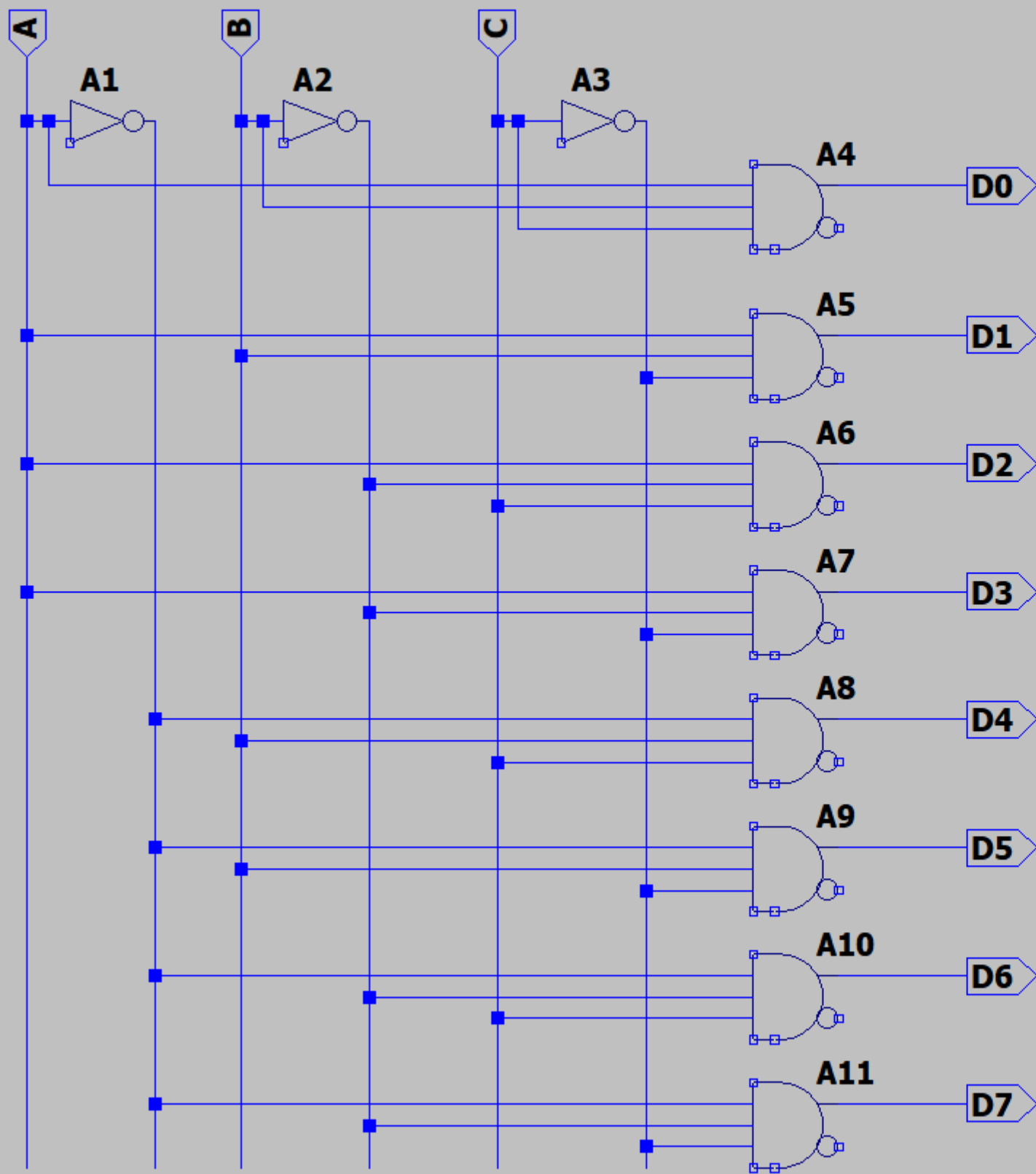
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VC1 C1 0 PULSE(0 1 100n 100n 100n 4.8m 10m 5)
VC0 C0 0 PULSE(0 1 100n 100n 100n 4.8m 10m 5)

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VC C 0 PULSE(0 1 1m 100n 100n 4.8m 10m 3)
VB B 0 PULSE(0 1 .5m 100n 100n 4.8m 10m 3)
VA A 0 PULSE(0 1 100n 100n 100n 4.8m 10m 3)
.tran 0 10m 0m

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