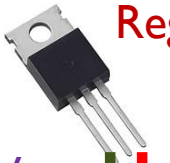
Tutorial 5

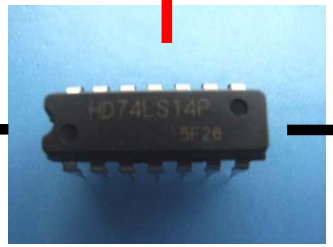
Assembly of the Navidroid



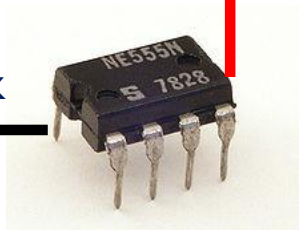
12V

5V

straighten



clock



Counter

Schmitt Trigger

NE555 timer

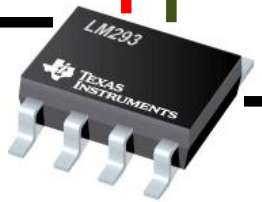
Comp. Input

Comparator

Dir.

Inverter

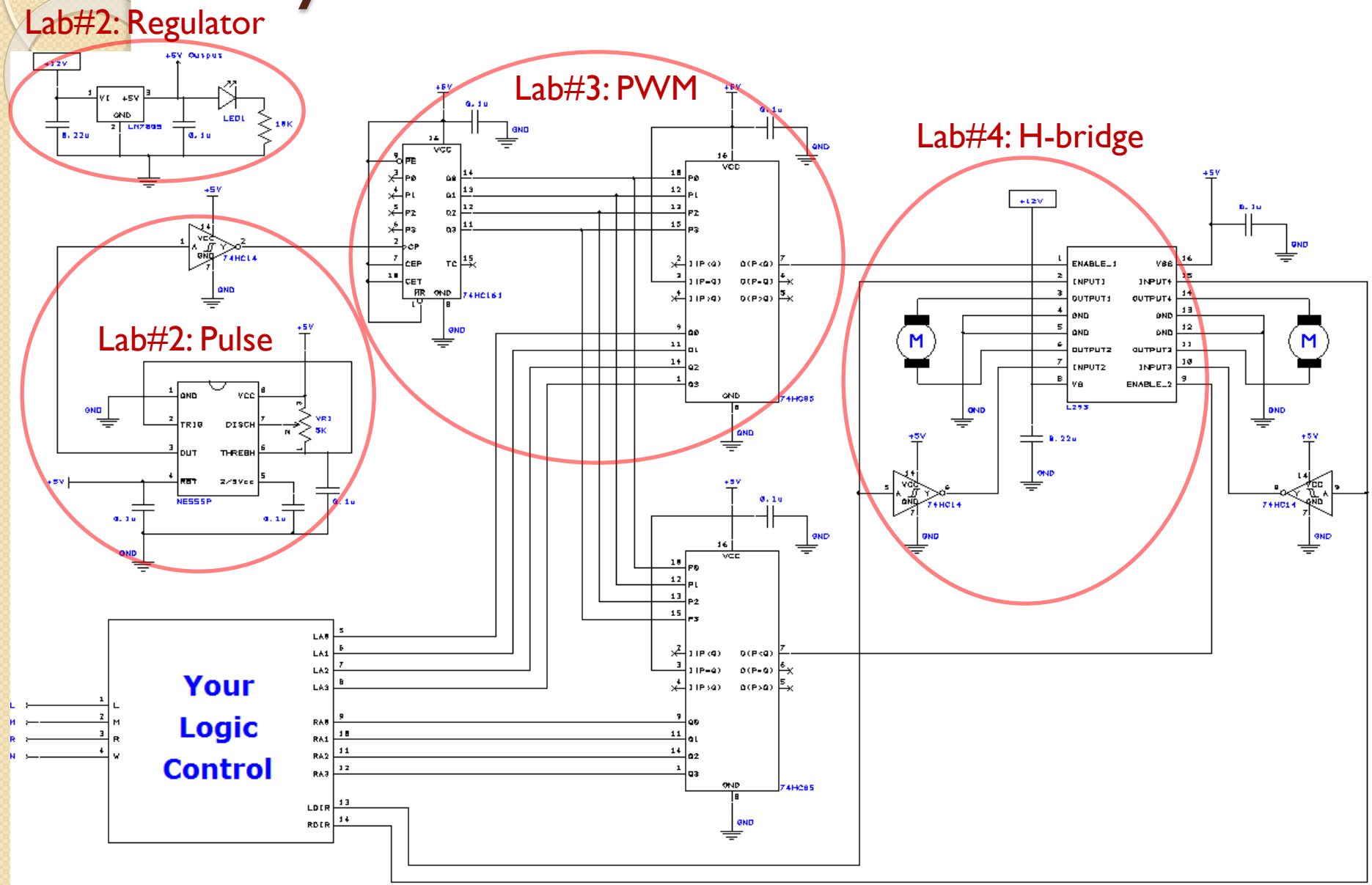
PWM signal



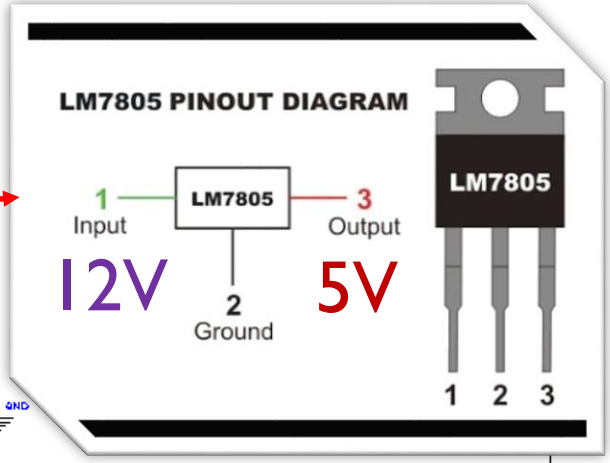
DC Motor Driver

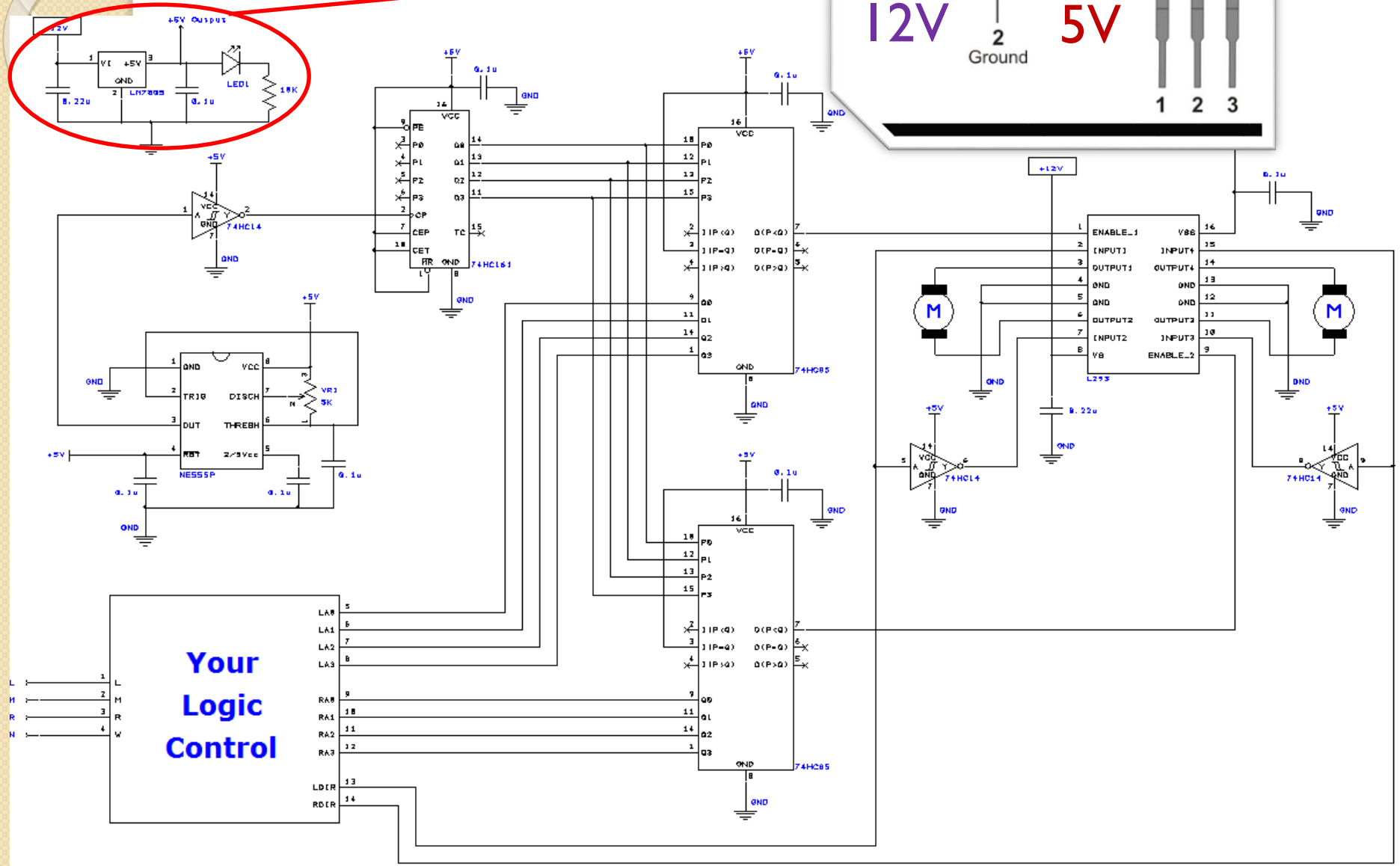
Car

In your lab#05



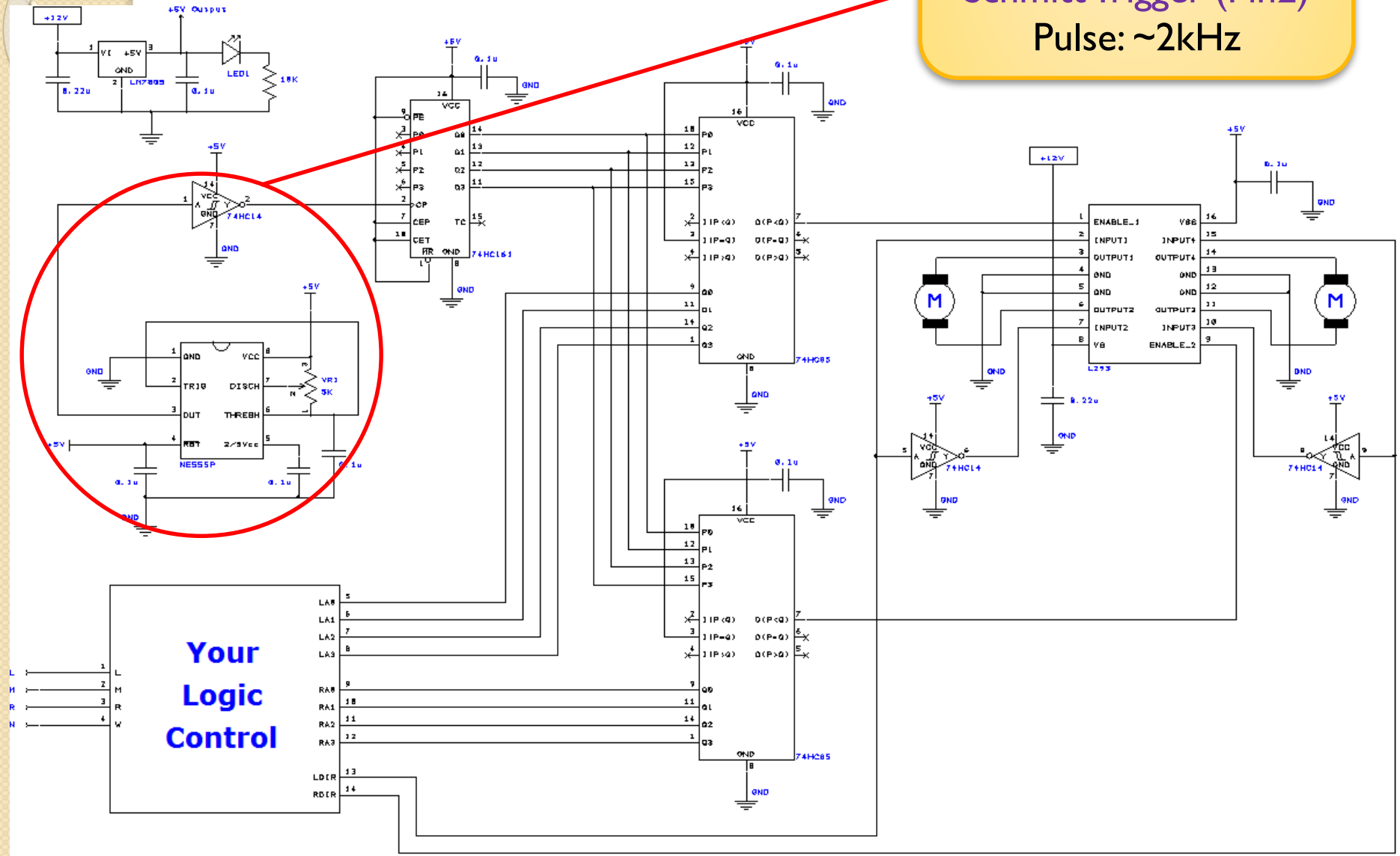
DC Regulator





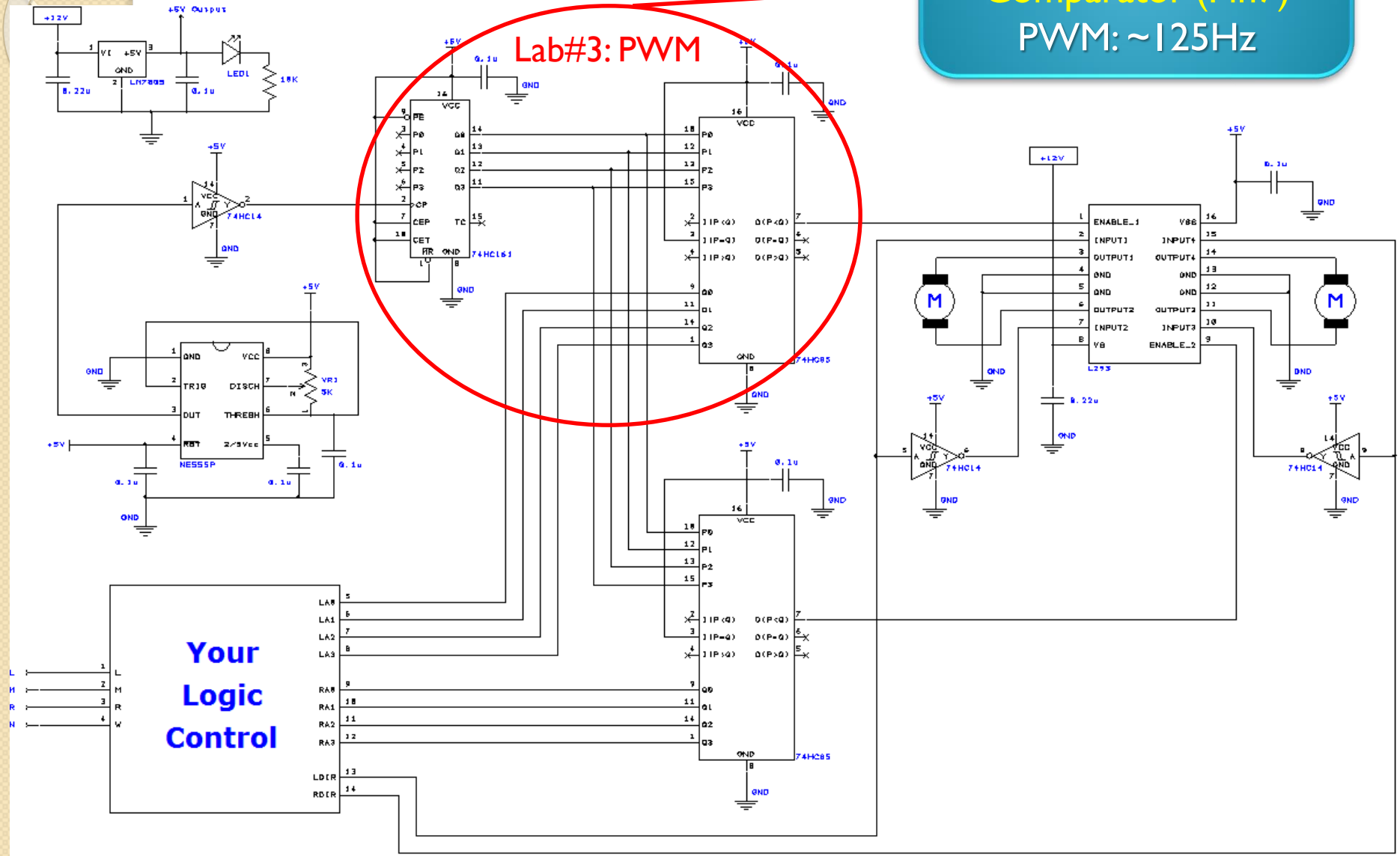
Pulse Generation

NE555 Timer (Pin3)
+
Schmitt Trigger (Pin2)
Pulse: ~2kHz

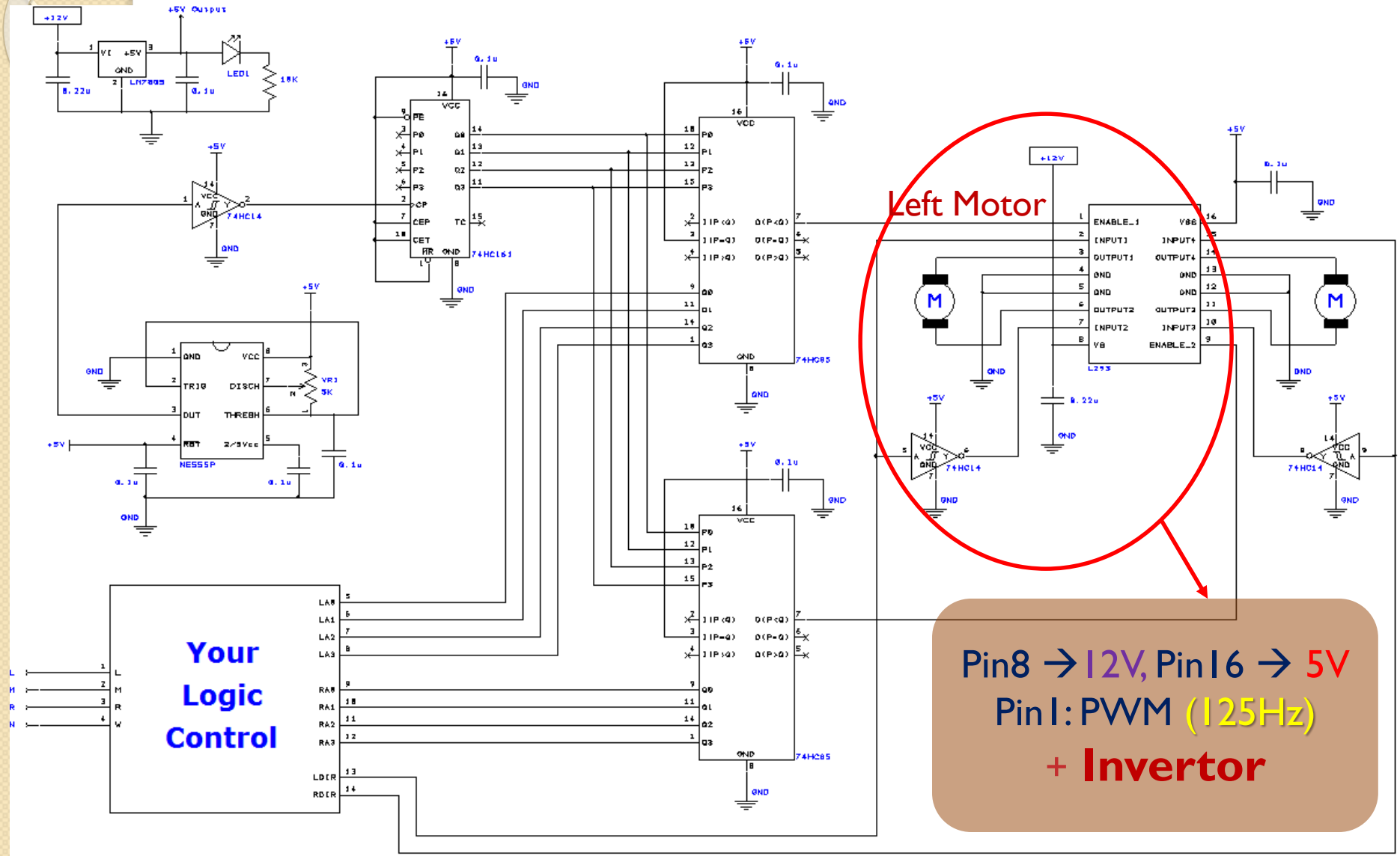


PWM Control

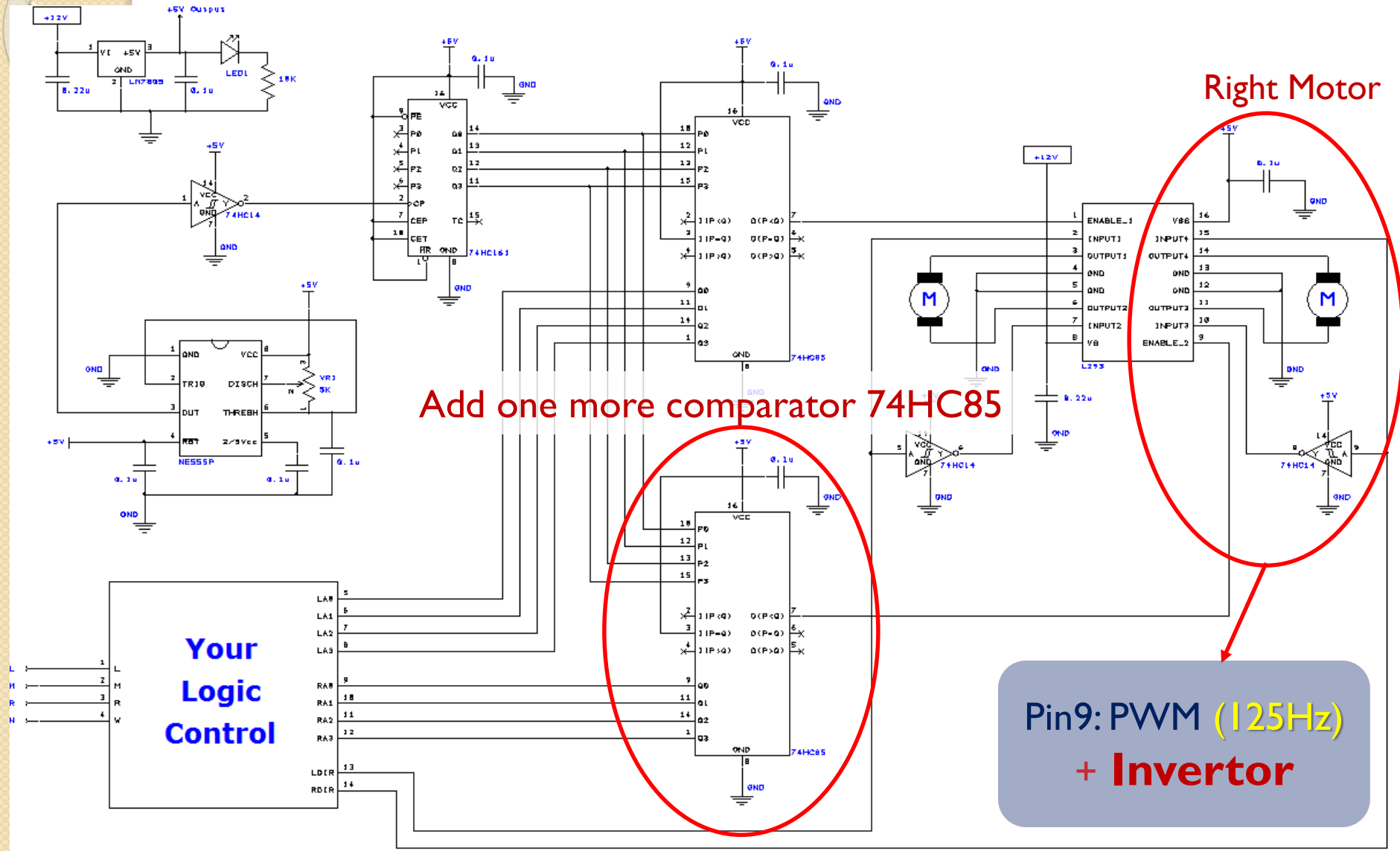
Counter (Pins11-14)
+
Comparator (Pin7)
PWM: ~125Hz



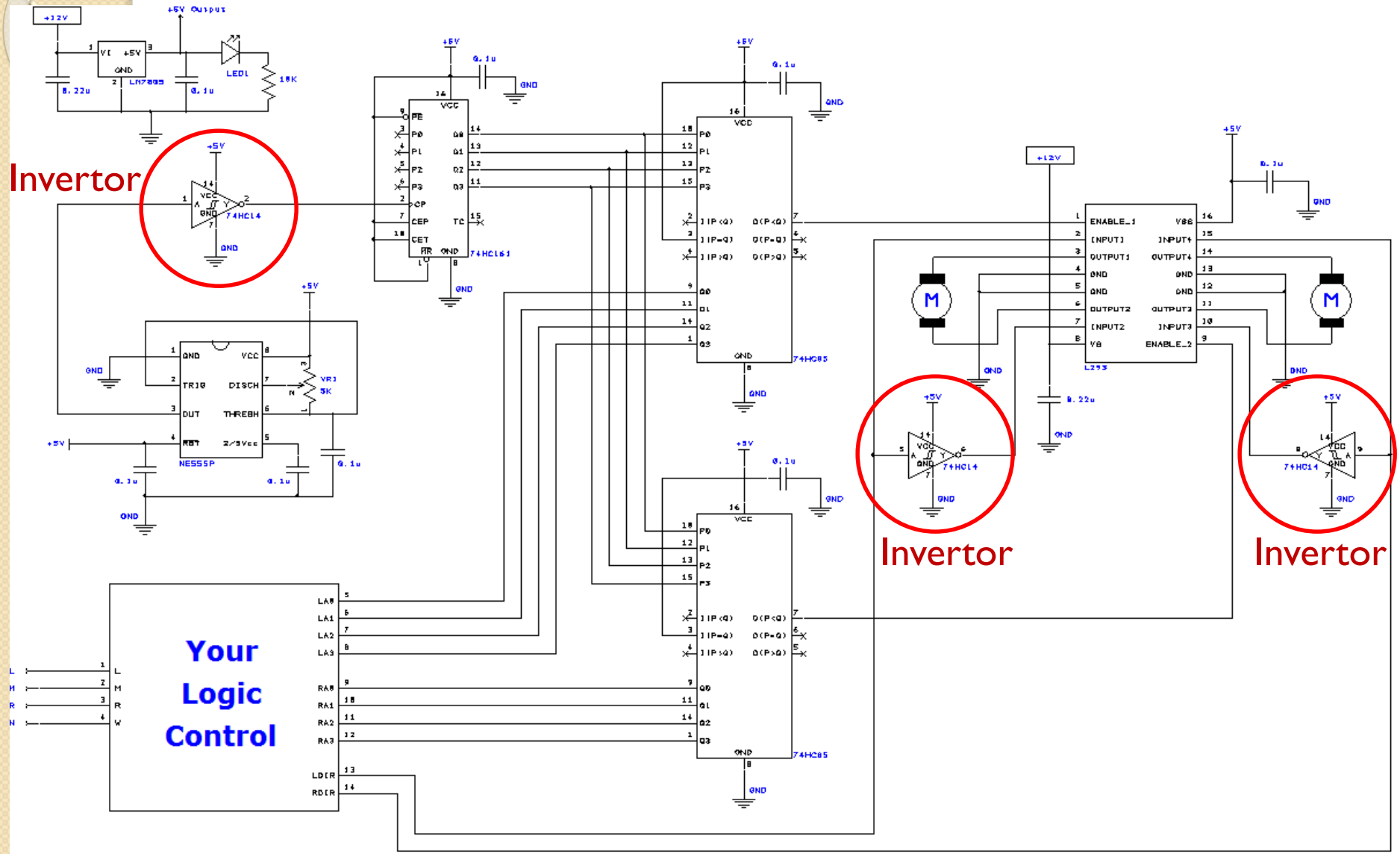
H-bridge Motor Driver



H-bridge Motor Driver



H-bridge Motor Driver

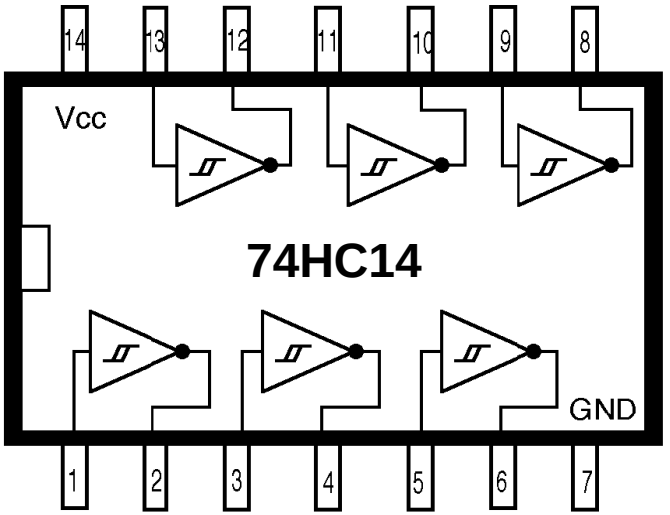


Schmitt Trigger

- The invertor

➢ 6 channels

- Pin14 → 5V
- Pin7 → GND



You may use any 3 of them to be the invertors in lab#05

Mini Debugging Report

Describe clearly:

- how you discovered it
- how you found out the source of the bug
- what the bug is
- how you fixed it