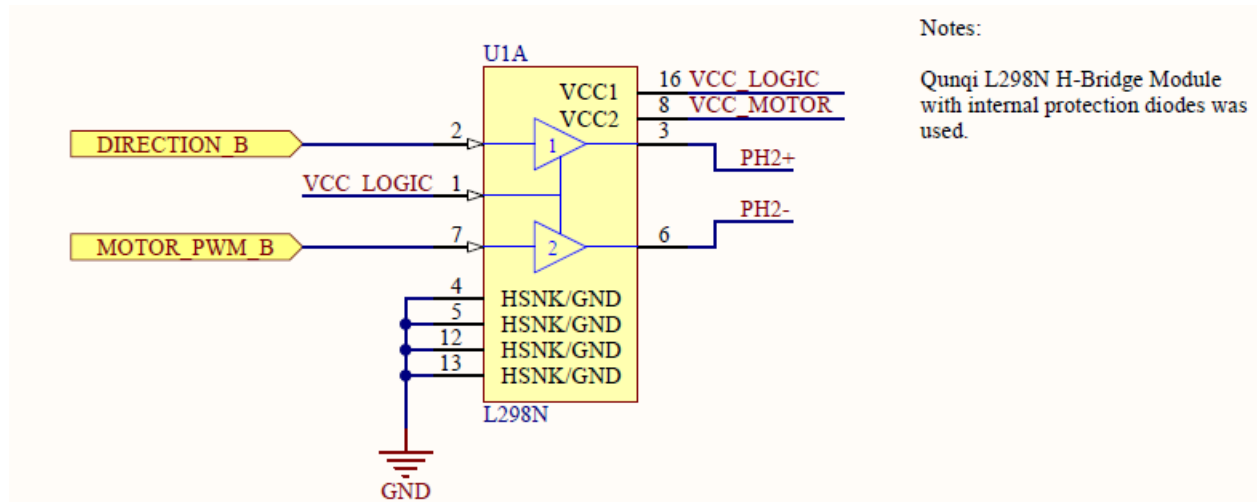# H-bridge

Figure 1: H-bridge Circuitry in Altium, for one motor

In this H-bridge circuit, the most important part is to make sure we can supply enough current. Note that this L298N is a dual motor driver board module, which already has diodes built in for inductive kickback, so let's focus on the current requirement.

The H-bridge is capable of outputting $4A$ current, and our motor coil resistance is 10Ω. We have two motors and at most we are driving them at $12V$, therefore the total current is:

$$I_{tot} = 2 * \frac{12V}{10\Omega} = 2.4A < 4A \tag{1}$$

so our L298N dual motor driver board can handle both of our motors at stall current.