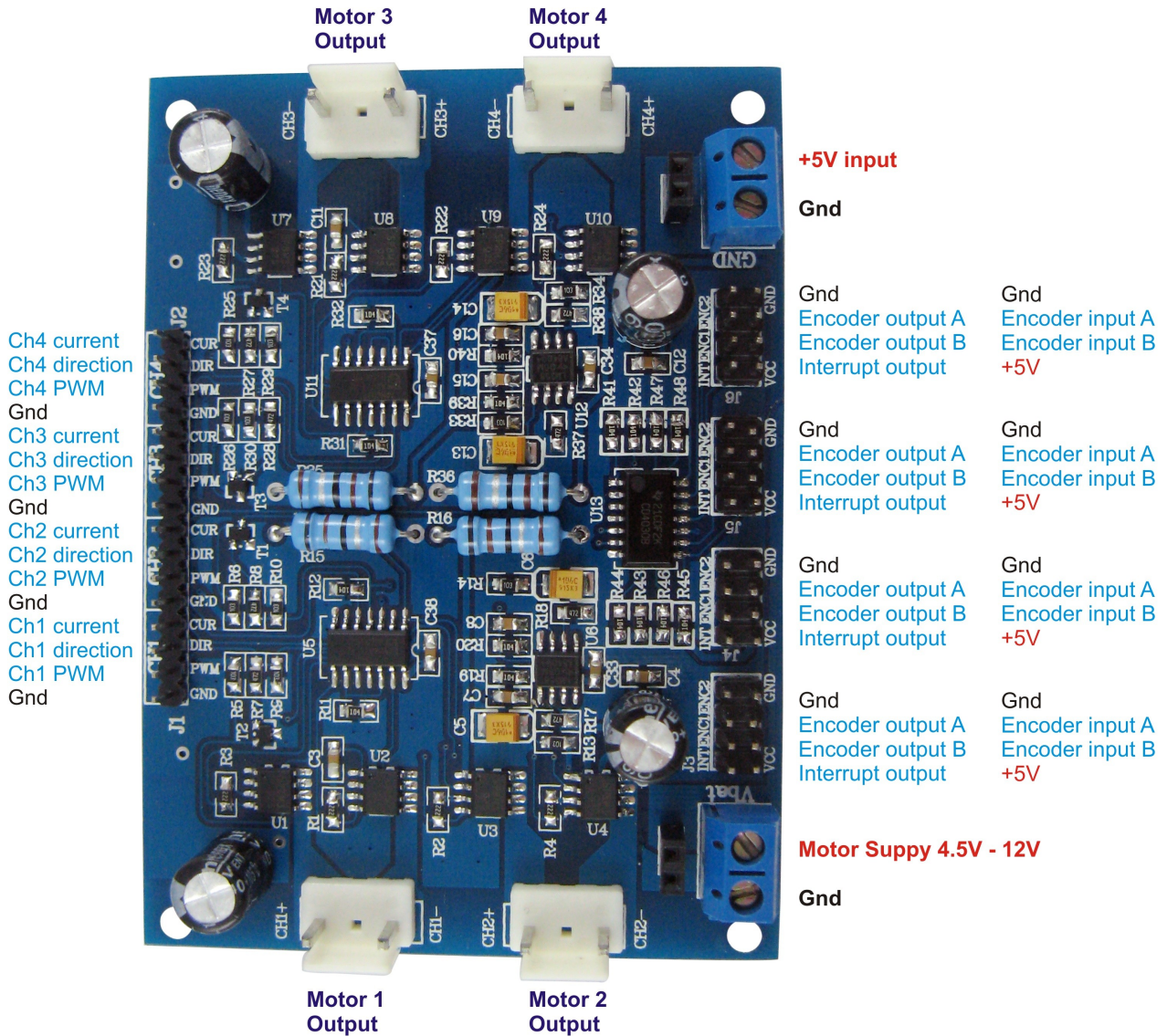


4 Channel Motor Control Unit

Designed originally for the Rover 5 chassis this driver PCB is ideal for any small robot using either Omni or Mecanum wheels. Current sensing for each motor allows the processor to determine if a motor has stalled or is under excessive load.

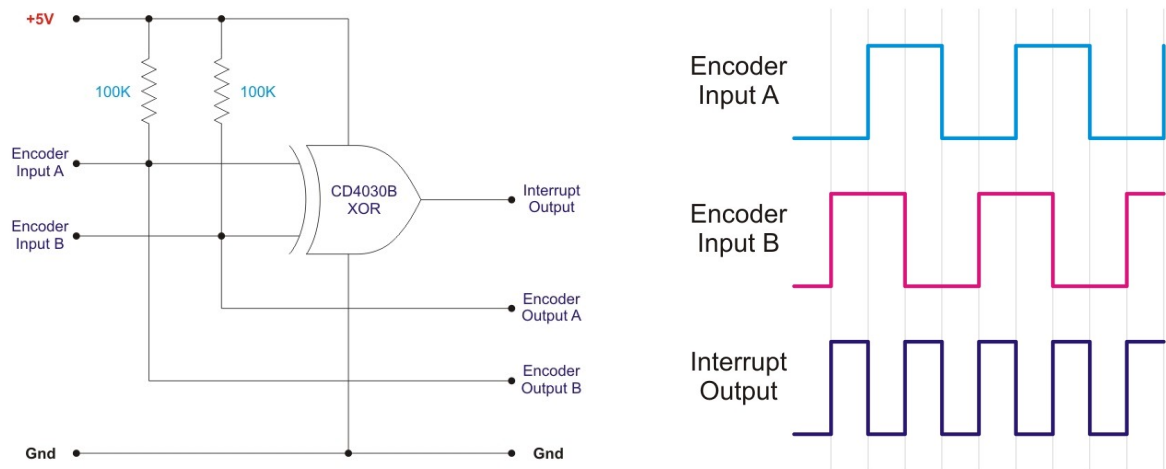


Features include:

- 4x low resistance FET “H” bridges.
- Each channel rated for 4A stall current.
- Easy to use control logic.
- Current monitoring for each channel.
- Quadrature encoder mixing circuitry.

The encoder mixing circuit:

Unlike most motor controllers this PCB includes 4 mixing circuits for use with up to 4 quadrature encoders. The mixing circuit takes the 2 inputs from a quadrature encoder and mixes them into a single output. Note that the interrupt output changes state when either input changes.



This allows a single interrupt pin to monitor both inputs of a quadrature encoder. Because the interrupt output is twice the frequency of either input it also allows speed and distance to be measured with twice the resolution.