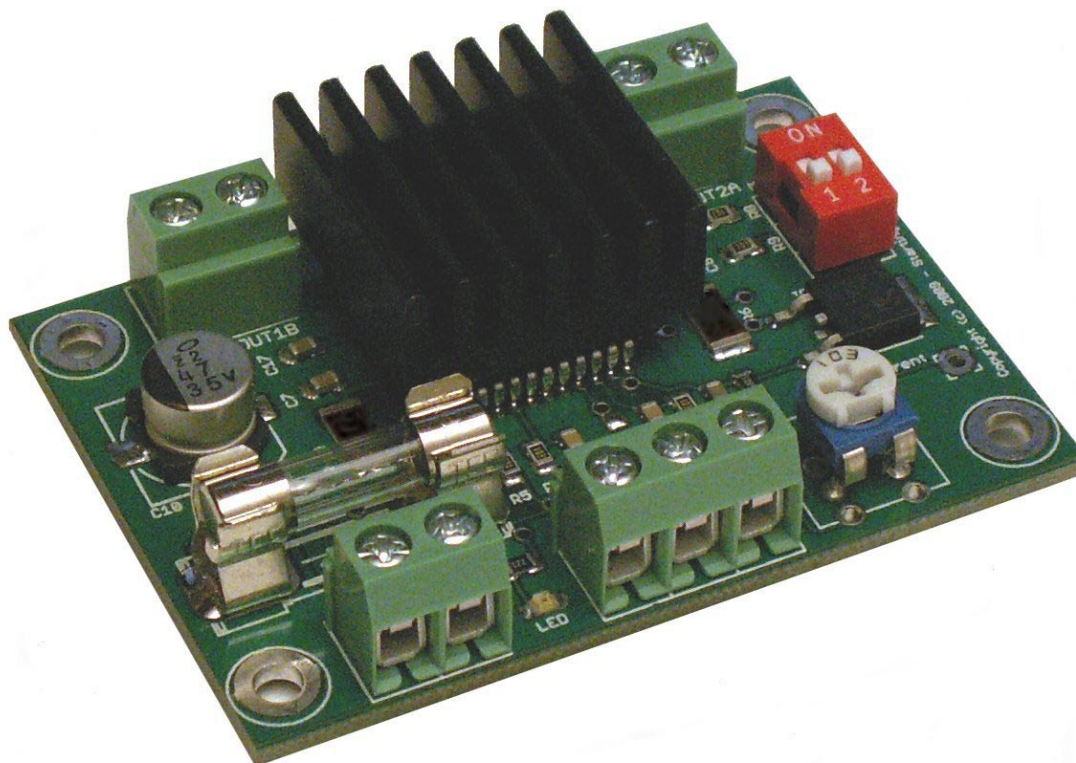


μStepper™ : CNC Stepper Motor Driver Board

Microstepping 1/2 step 1/4 step 1/8 step

2.5 Amps @ 35 Volts

Bipolar PWM Current Chopper



The advantage compared to other boards : simplicity of use !

- Just one power supply to provide (the board makes it own 5V locally).
- Motor current setting follows the 1Amp for 1Volt rule (say you want 800mA -> set the potentiometer voltage to 0.8V and that's it) up to 2.5A.
- Compatible with all popular PC software (Mach3 TurboCNC...) or microcontrollers.
- Compatible with all motor types: 4 wires, 6 wires, 8 wires.
- Compact size 1.8" x 2.5" (45mm x 64mm) and 1/8" (3.2mm) mounting holes.

But the performance level is on par with most expensive boards out there !

This board uses the highest performance stepper motor driving mode, the current chopper switching PWM regulator.

This provides the highest speed possible from your motor, and makes it possible to power, for example, a 5V motor with a 24V power supply. It is not mandatory to use a well regulated power supply.

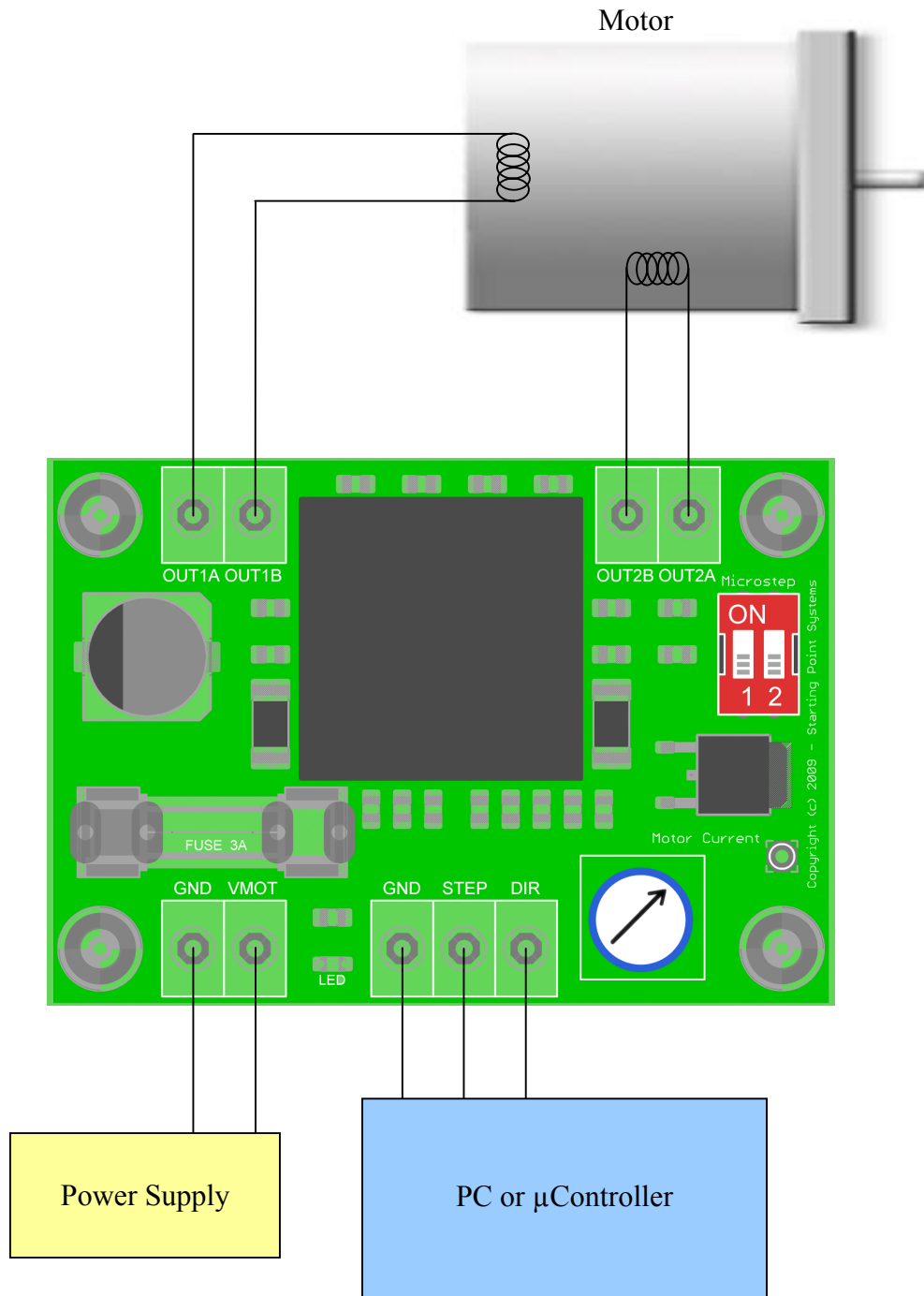
The voltage range supported makes it possible to use a variety of power supply types, for example the 12V from a PC supply, the 19V-24V from a laptop supply, or even batteries or accumulators.

The Step/Dir drive signals (the widest found mode) makes it compatible with the most popular softwares, like Mach3, TurboCNC... and the step frequency can go up to 500kHz.

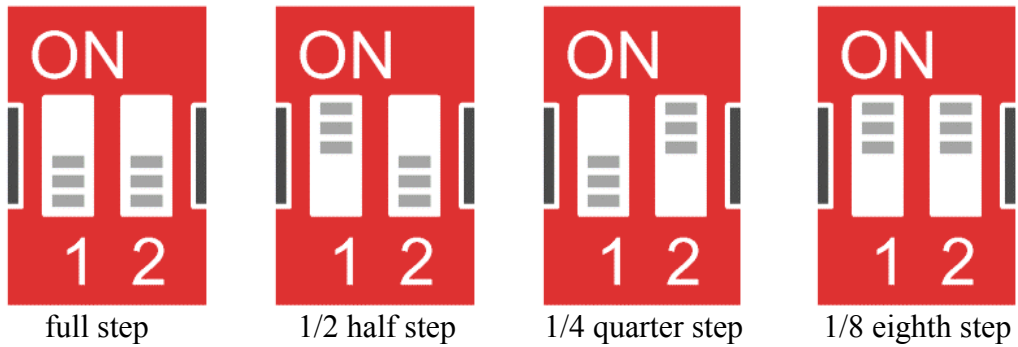
Technical Specs :

- 2.5 Amps - 35 Volts (Supply voltages : 9 to 35 Volts)
- Linear 5V regulator on board (only one supply voltage to bring to the board)
- PWM current chopper regulator (does not depend on an accurate supply voltage)
- Very easy to setup motor current : 1V -> 1A (for example, if you want 800mA in your motor coils -> set the potentiometer voltage to 0.8V with a multimeter and you're done).
- Step/Dir drive mode with 3 à 5 Volts signals – PC // port or µController
- Full Step 1/1, Half Step 1/2, Quarter Step 1/4, Eighth Step 1/8 (selection with dipswitches)
- Easy wiring with standard screw terminals
- Power on indication led
- Step frequency up to 500kHz
- Fuse protection on power supply rail (protects the board, but also your power supply and motor)
- Large heatsink : no need for a fan in most applications
- Thermal shutdown protection

Cabling diagram



Microstepping switches settings



Connecting motors with 4, 6 or 8 wires

