EasyDriver v4.4

An easy to use bipolar stepper motor driver
Use 4 wire, 6 wire or 8 wire stepper motors
From about 150mA/phase to about 750mA/phase
Defaults to 5V for Vcc (logic supply), settable to 3.3V
Supply 8V to 30V DC power input on JP1
Do not connect or disconnect motor while EasyDriver is powered

DEFAULT OPTIONS
Short JP5, JP6, JP7 pins to GND or Vcc to override
SLEEP = Vcc (awake)
MS1 = Vcc (1/8 microstep)
MS2 = Vcc (1/8 microstep)
ENABLE = GND (enabled)
RESET = Vcc (not reset)
PFD = Vcc (slow decay mode)

TP1 - VREF input to driver
Monitor this test point with meter as you adjust current adj pot
Valid range 1.0V to Vcc
At VREF of 5V max current will be 833mA
At VREF of 3.3V max current will be 550mA
Minimum current gives smoothest microsteps
Maximum current gives highest torque

DIR is level sensitive
A rising edge on STEP causes a step
Both take 0V to Vcc

Coil 1 of motor across OUT1B and OUT1A
Coil 2 of motor across OUT2B and OUT2A

Power Input
8V to 30V (Vcc = 5V)
6.3V to 30V (Vcc = 3.3V)
Max 70mA used by EasyDriver
The rest you can use

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Both C3 and C1 must be rated for >=35V

Change List:
v4.3 (12/09/2009)
- v4.3 Added mounting holes
- v4.4 (10/24/2010)
- Fixed MIN/MAX silkscreen
- All vias now .02"
v4.4 (1/3/2012)
- C3 now at 47uF

www.schmalzhaus.com/EasyDriver

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Produce by Spark Fun Electronics

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