

EasyDriver v4.3

www.schmalzhaus.com/EasyDriver

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

TP1 - UREF input to driver
Monitor this test point with meter as you adjust current adj pot
Valid range 1.0V to Vcc
At UREF of 5V max current will be 833mA
At UREF of 3.3V max current will be 550mA
At UREF of 1V max current will be 166mA
Minimum current gives smoothest microsteps
Maximum current gives highest torque

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)

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)

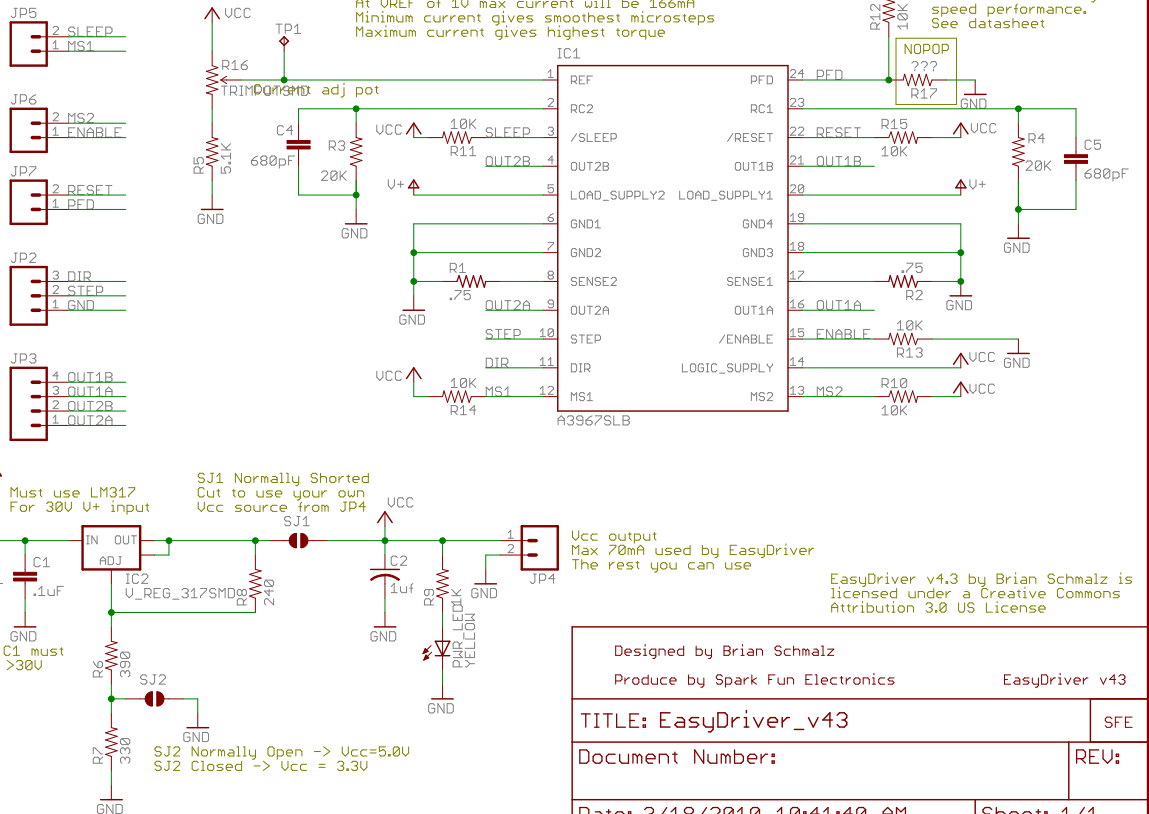
Must use LM317
For 30V V+ input

SJ1 Normally Shorted
Cut to use your own
Vcc source from JP4

Vcc output
Max 70mA used by EasyDriver
The rest you can use

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Change List:
v4.3 Added mounting holes



Designed by Brian Schmalz

Produce by Spark Fun Electronics

EasyDriver v43

TITLE: EasyDriver_v43

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