EasyDriver v4.2

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)

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

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
At VREF of 1V max current will be 166mA
Minimum current gives smoothest microsteps
Maximum current gives highest torque

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

AJP1 - 30V Vcc source
Both C3 and C1 must
Be rated for >30V

www.schmalzhaus.com/EasyDriver

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