

EasyDriver v4.4

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

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

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

PFD intermediate voltage
Change R12 and add in R17 to create any voltage on PFD for best high speed performance.
See datasheet

