

# BigEasyDriver v1.2

[www.schmalzhaus.com/BigEasyDriver](http://www.schmalzhaus.com/BigEasyDriver)

An easy to use bipolar stepper motor driver  
 Use 4 wire, 6 wire or 8 wire stepper motors  
 From 0mA/phase to over 2A/phase  
 Defaults to 5V for Vcc (logic supply), settable to 3.3V  
 Supply 8V to 35V DC power input on JP1 or JP7  
 Do not connect or disconnect motor  
 while BigEasyDriver is powered

**DEFAULT OPTIONS**  
 Short JP10, or JP6 pins  
 to GND or Vcc to override

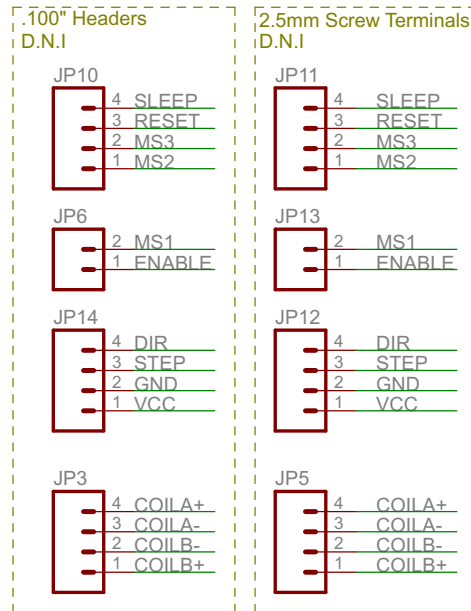
SLEEP = Vcc (awake)  
 MS1 = Vcc (1/16 microstep)  
 MS2 = Vcc (1/16 microstep)  
 ENABLE = GND (enabled)  
 RESET = Vcc (not reset)  
 MS3 = Vcc (1/16 microstep)

**NOTE:** VCC is normally an OUTPUT. You do not need to supply power to the Big Easy Driver through VCC. The only power needed is through M+ (motor power).

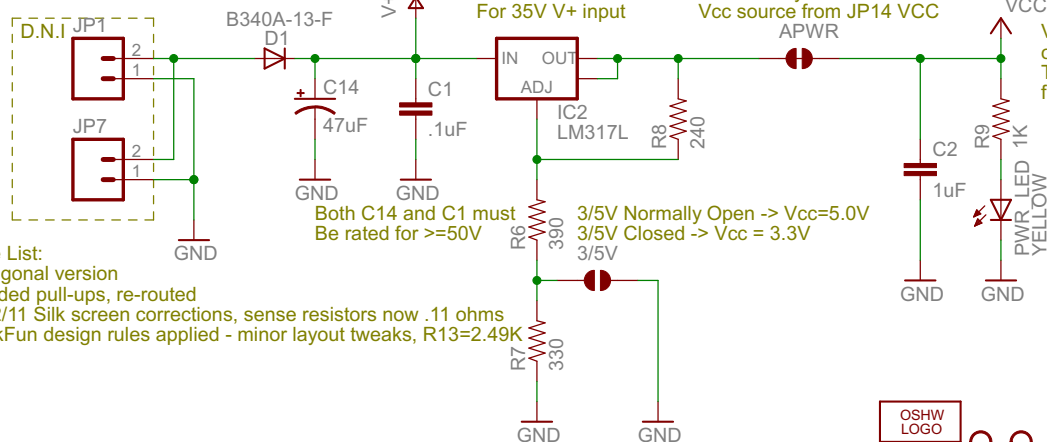
You only need to connect M+, GND, STEP, DIR and the motor outputs  
 All other I/O is set to default  
 to 1/16th microstep mode

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

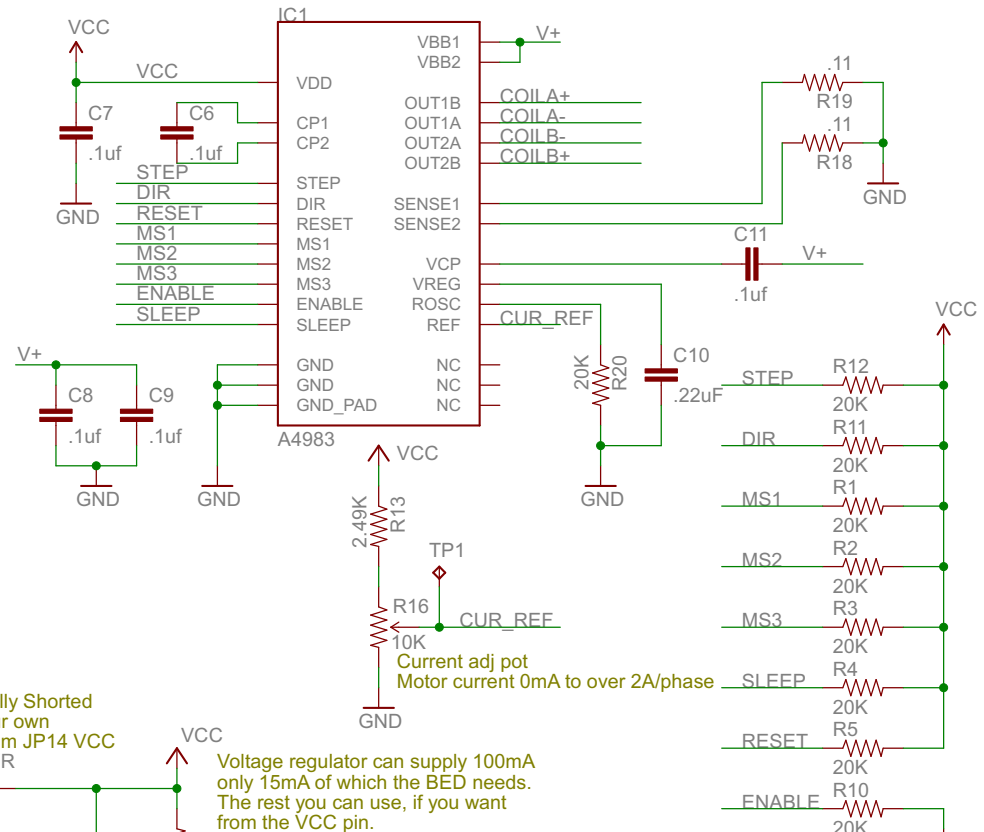
**Bi-polar Stepper Motor Outputs**  
 Coil A of motor across  
 COILA+ and COILA-  
 Coil B of motor across  
 COILB+ and COILB-



**Power Input JP1, JP7**  
 8V to 35V DC



**Change List:**  
 v1.0 Original version  
 v1.1 Added pull-ups, re-routed  
 v1.2 5/2/11 Silk screen corrections, sense resistors now .11 ohms  
 SparkFun design rules applied - minor layout tweaks, R13=2.49K



Voltage regulator can supply 100mA only 15mA of which the BED needs. The rest you can use, if you want from the VCC pin.

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