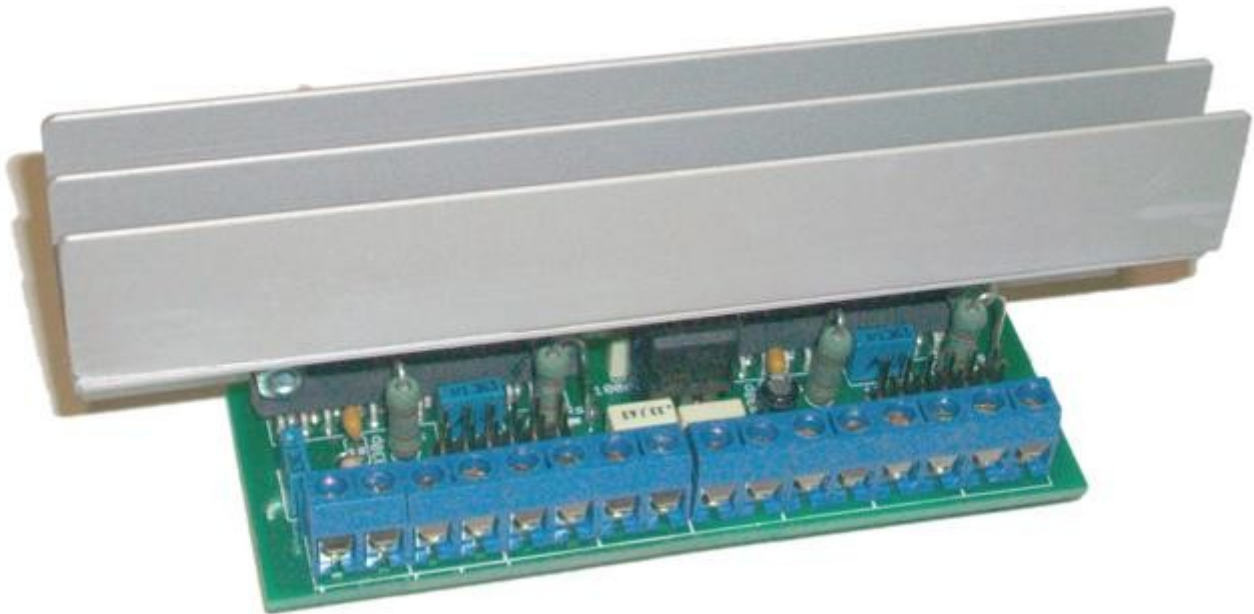


2 Axis axis bipolar Stepping Motors Driver



Features:

- Uses Toshiba TB6560AHQ or TB6560HQ Bipolar Stepping Driver, maximum 3.5A drive current
- 12 - 30V supply
- Jumper selectable step resolution for full step, 1/2 1/4 1/8 (TB6560HQ) or full 1/2 1/8 1/16 (TB6560AHQ)
- Adjustable motor current at 100%, 75%, 50%, 20% of full current
- Adjustable current decay
- Built-in overheat protection
- Small form of 3.55"x1.3" board dimensions

Parts List:

5x Polyester capacitor 100 nF
1x Polyester capacitor 330 nF
2x Ceramic capacitor 330 pF
1x Electrolytic Capacitor 10 uF 25 VDC
1x Electrolytic Capacitor 47 uF 50 VDC
1x Voltage regulator 7805
2x TB6560AHQ or TB6560HQ
1x 4K7 1/4w resistor
8x 2 Pin screw terminal block
2x 2PX6 pin header
4x 2 watt resistor (not wirewound) ohm=0.5/max current

Jumper settings



Out B2
Out B1
Out A2
Out A1
Dir
Clk

+5V Out
Gnd
24V
Enable

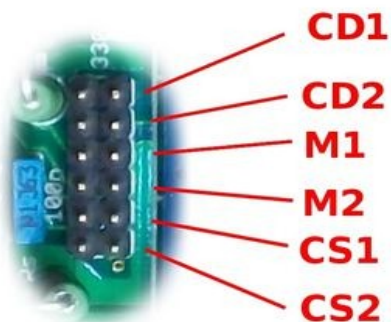
Out B2
Out B1
Out A2
Out A1
Dir
Clk

Current Setting	CS2	CS1
100%	open	open
75%	open	closed
50%	closed	open
20%	closed	closed

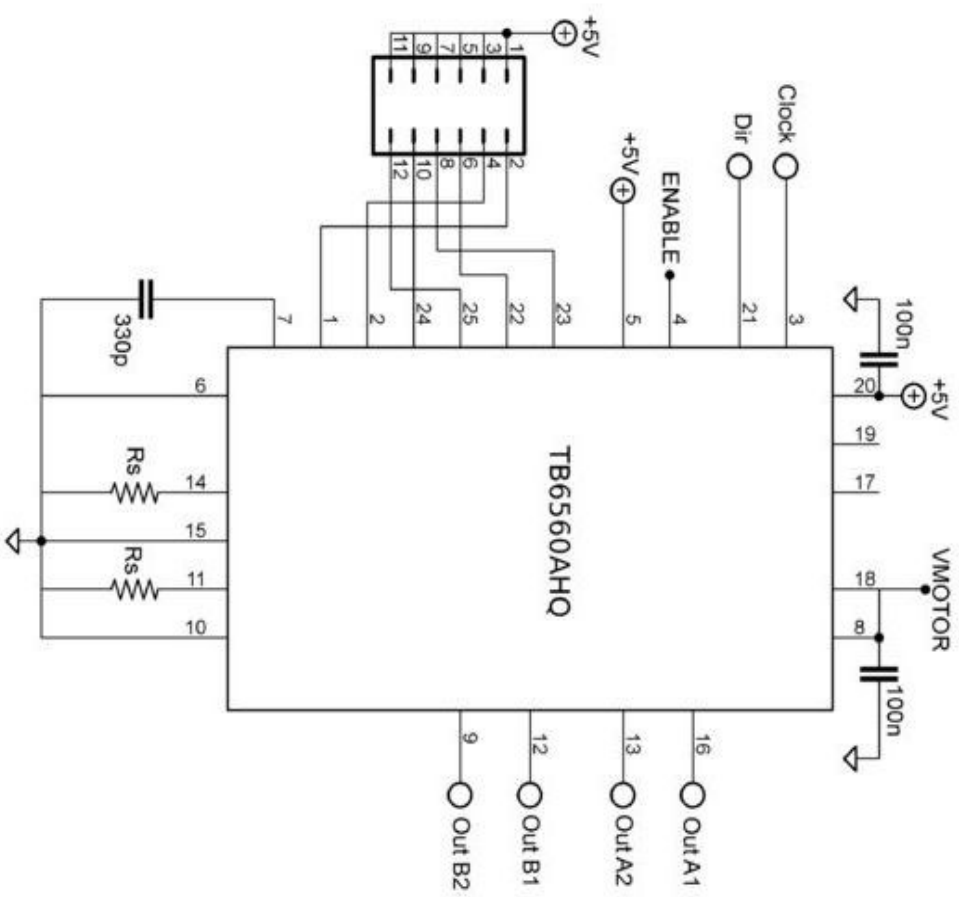
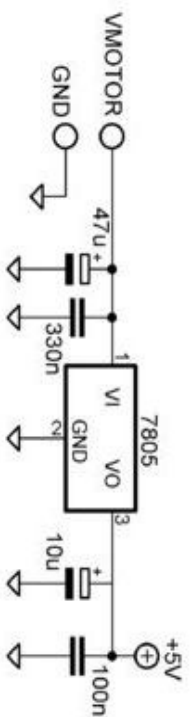
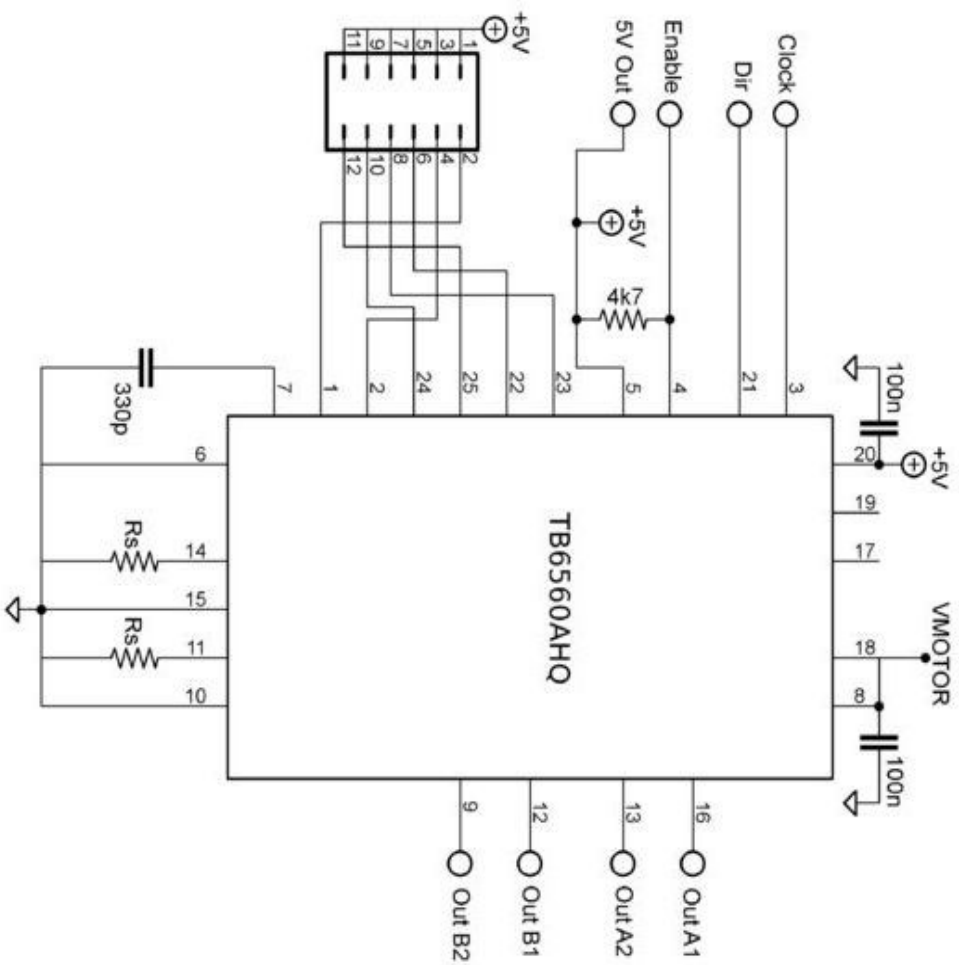
Microstep Mode	M2	M1
1/1	open	open
1/2	open	closed
1/4 (1/16)*	closed	open
1/8	closed	closed

* 1/4 TB6560 - 1/16 TB6560A

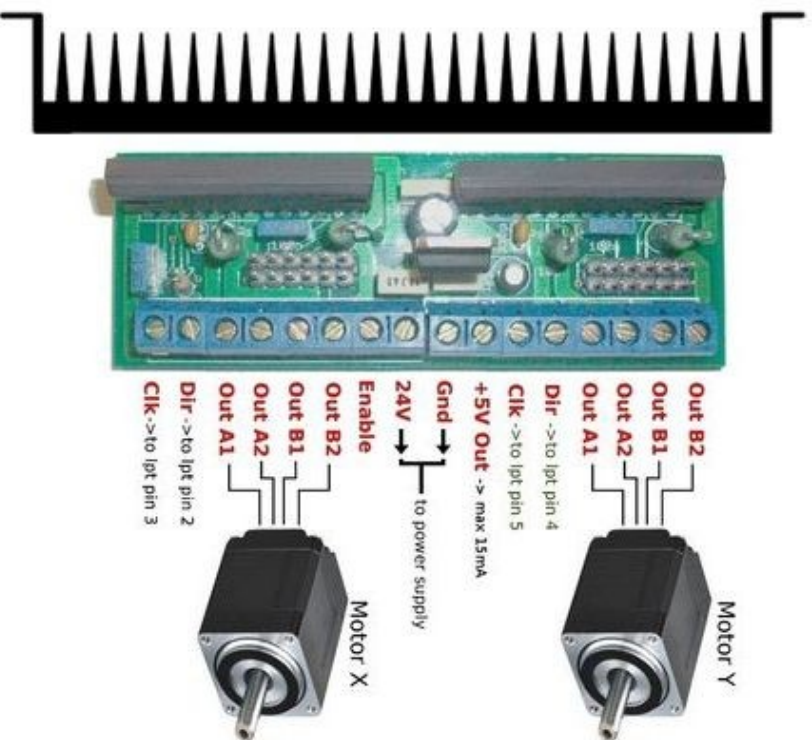
Current Decay Mode	CD2	CD1
Normal	open	open
25%	open	closed
50%	closed	open
Fast	closed	closed



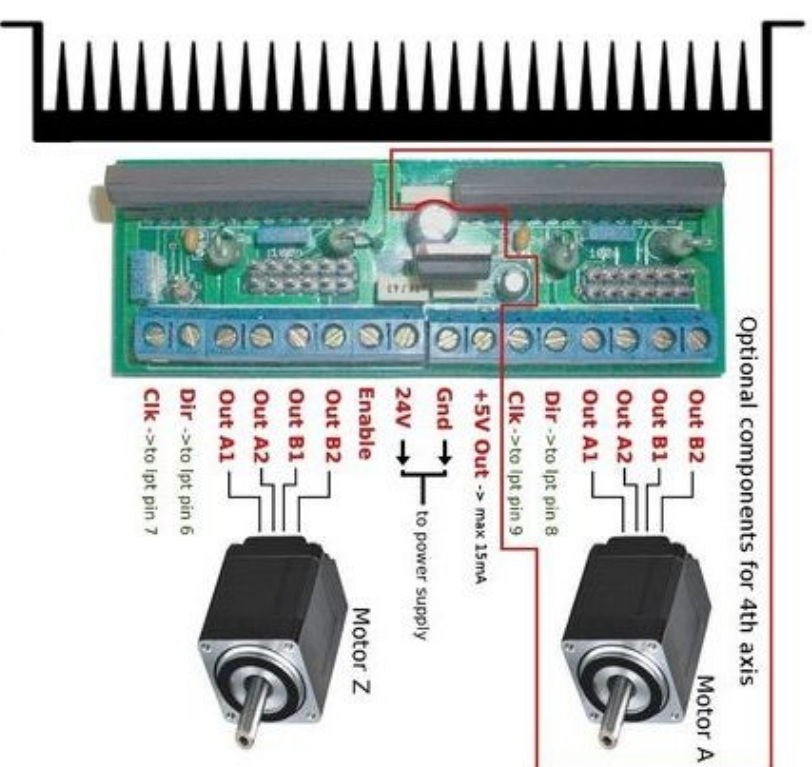
$R_s \text{ (ohm)} = 0.5 / \text{Max current}$
 $W_R \text{ (watt)} = 0.5 * \text{Max current}$



Minimal wiring for 3-4 axis cnc mill-router (2 PCBs needed)



- Enable input has an onboard pull-up resistor and can be left unconnected



- Connect heatsink to Gnd