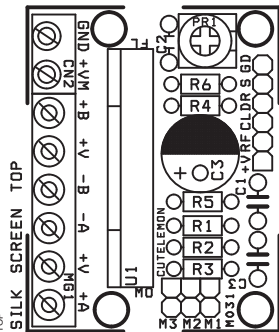
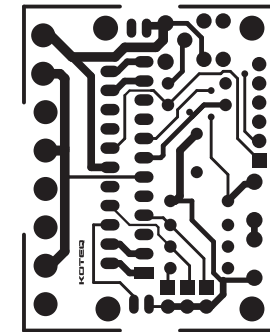
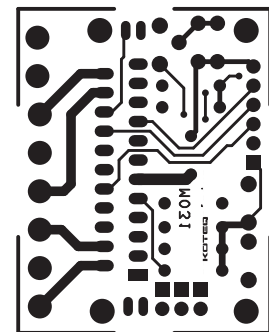
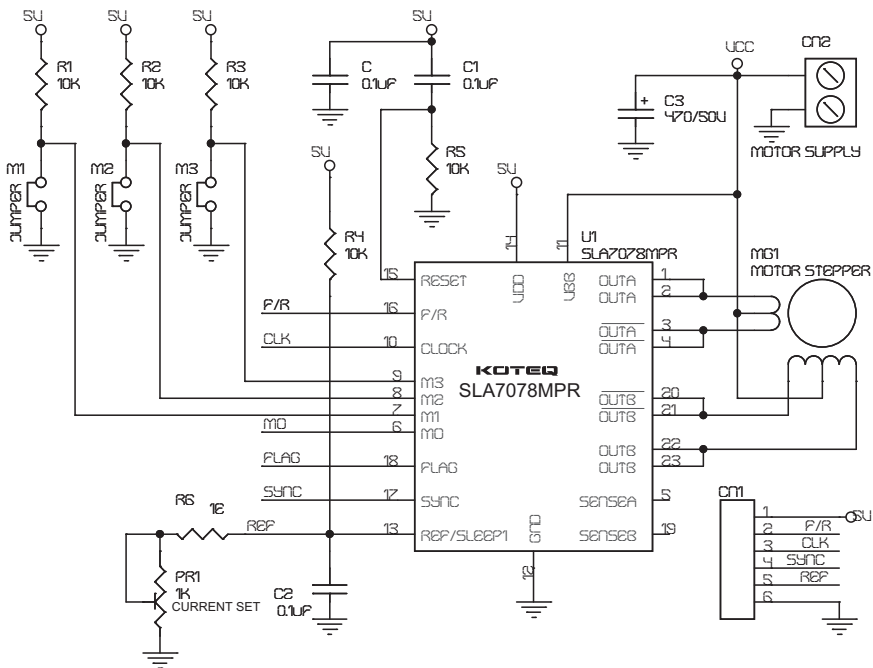
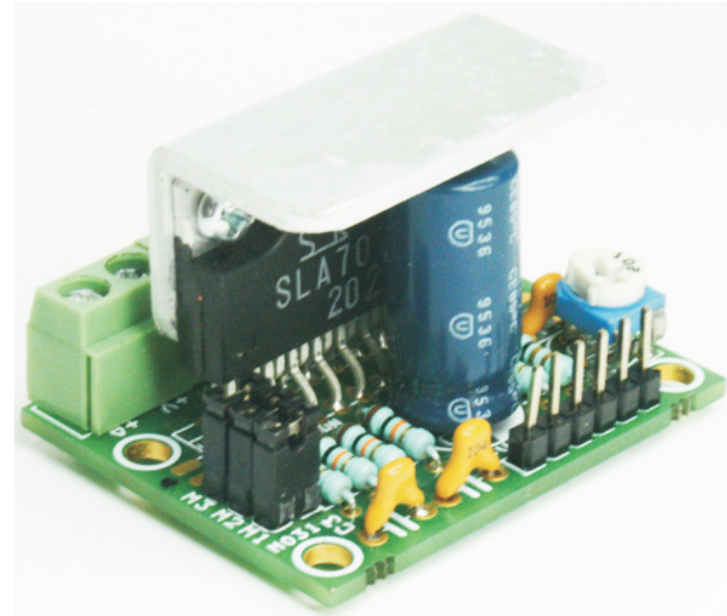
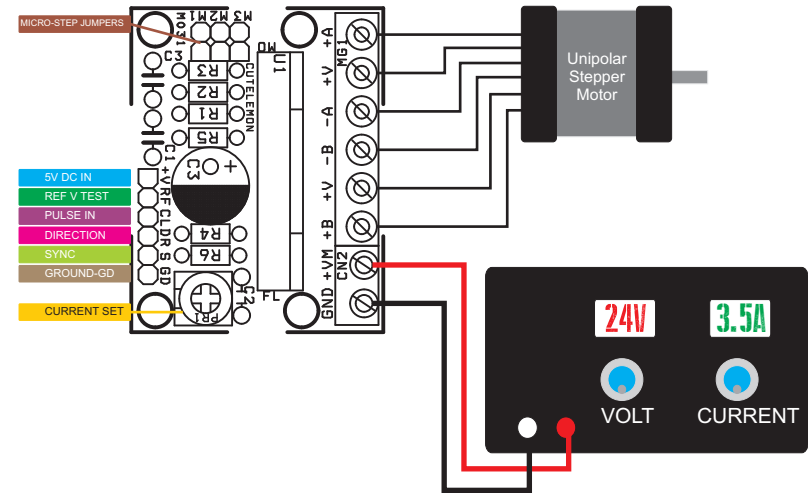
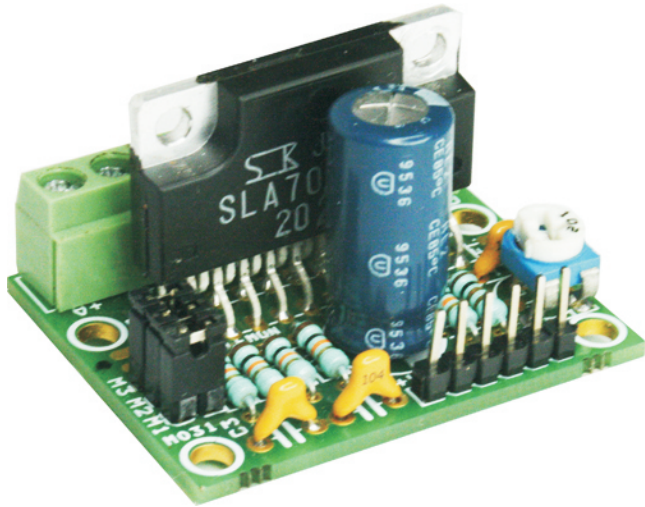


3 Amp Unipolar Stepper Motor Driver Module

Unipolar stepper board is a high efficient stepper driver for Unipolar stepper motor been design for various application like robotics, control routers, lathes, mills, PCB drillers and engravers.

- ✎ Step,Dir,Sync,Input via header connector
- ✎ Micro-stepping settings via on board jumper, M1,M2,M3
- ✎ 1/16th Micro-stepping possible
- ✎ Supply input and stepper connection via screw terminal connector
- ✎ Inbuilt fault protections in IC for over temp and short circuit
- ✎ Motor Supply 42V @ 3Amp
- ✎ Logic Supply 5V DC





J1	J2	J3	FULL/HALF STEP	MICRO-STEPPING
L	L	L	FULL STEP MODE MODE 8 FIXED	FULL STEP MODE
H	L	L	FULL STEP MODE F FIXED	FULL STEP MODE F FIXED
L	H	L	HALF STEP	HALF STEP
H	H	L	HALF STEP MODE F FIXED	HALF STEP MODE F FIXED
L	L	H	SLEEP 2 FUNCTS	QUARTER STEP
H	L	H		EIGHTH STEP
L	H	H		SIXTEENTH STEP
H	H	H		SLEEP 2 FUNCTIONS

H= JUMPERS OPEN L=JUMPERS CLOSE

1	3	C1,C2,C	0.1uF
2	1	CN1	6Pin Header Connector
3	1	CN2	2Pin Screw Terminal
4	1	C3	470/50V
5	3	MG1	2Pin Screw Terminal
6	3	M1,M2,M3	JUMPER with Closer
7	1	PR1	1K Preset
8	5	R1,R2,R3,R4,R5	10K
9	1	R6	1E
10	1	U1	SLA7078MPR
11	1	HT	Heatsink
12	2	SCW	M3X3 Screw

This tiny Unipolar stepper motor driver has been designed around SLA7078MPR IC from Sanken, It is unipolar stepper Motor driver can handle current up to 3 Amps, micro-stepping upto 1/16 steps. On-board Jumpers to set the Micro-stepping, Preset (Potentiometer) to set the current.

The SLA7070MPR series motor driver ICs features unipolar drivers. The clock-in type input interface allows simplified control logic, and options for built-in sense current detection and load circuit short or open protection (patent pending) provide lower loss, and lower thermal resistance.

The built-in excitation distribution circuit (sequencer) allows motor control using only the CLOCK signal for simple operations (rotate/stop), with motor speed control by frequency input into CLOCK pin. This eliminates logic signal lines required for conventional phase-input methods, and reduces demand on heavily-used CPUs.

Unipolar stepper board is high efficient stepper driver for Unipolar stepper motor been design for various application like robotics, control routers, lathes, mills, PCB drillers and engravers.

10 Pin Header connector for signal inputs, Step, Dir, 5V, Sync, Vref/Sleep

Reference Voltage VS Output Current: 0.1V to 0.45V, 0-3Amps

Micro-stepping via on board jumper settings

Micro-stepping possible : Full Step, Half Step, 1/4th Step, 1/8 Step 1/16 Step

Onboard preset for current adjustment

Supply input and stepper connection via screw terminal connector

Inbuilt fault protections in ic for over temp and short circuit

Power supply 12-42 VDC @ 3A

For Normal Operation, V Ref should be less then 1.5V, Applying a voltage greater then 2.0V (High level) to VREF pin disables the drive and puts the motor in free state (Coast)

