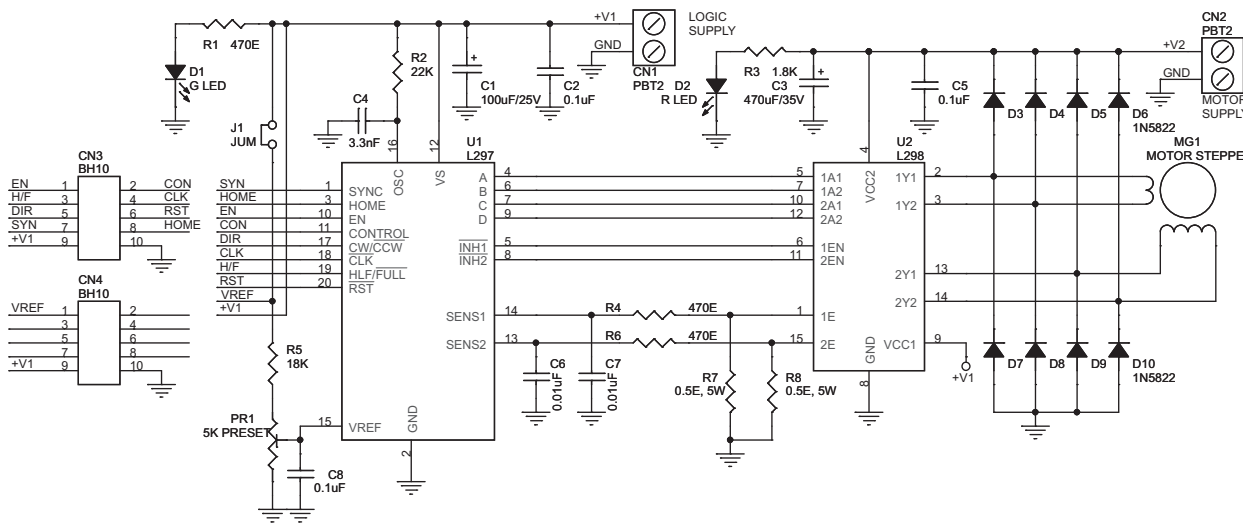
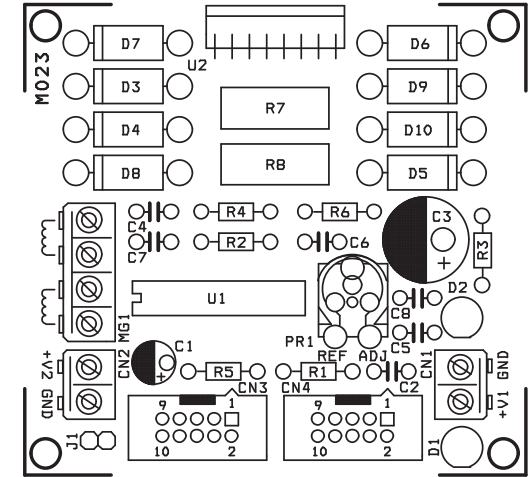
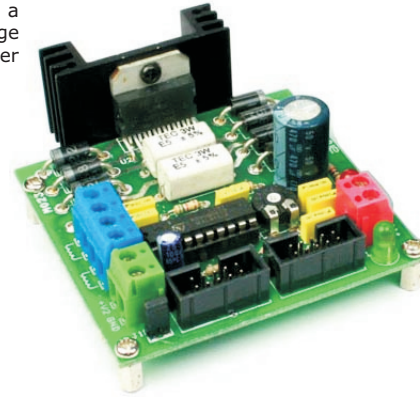


HIGH CURRENT BIPOLAR STEPPER MOTOR CONTROLLER

High Current Bipolar Stepper Motor Controller project is based on chopper drive. Chopper drive is a method of providing a constant current source to a device. Chopper drive allows for use of higher voltage power supply for better performance and higher speed. It uses SGS Thomson's L297 and L298 controller IC's.

- Logic supply : 5 VDC @ 300 mA
- Motor Supply : 8 to 30 VDC
- Connection via 10-pin Box Header for easy interface with any microcontroller development boards
- External or internal voltage reference option via jumper connector
- Onboard preset for current adjustment
- High speed switching diodes for L298 IC protection
- Power-On LED indicator for both the supplies
- Screw terminal connector for easy supplies and motor connection
- Heat sink included
- Four mounting holes 3.2 mm each
- PCB dimensions 74 mm x 70 mm



SR.	QTY.	REF.	DESCRIPTION
1	2	CN1,CN2	2 PIN SCREW TERMINAL CONNECTOR
2	2	CN3,CN4	10 PIN BOX HEADER CONNECTOR
3	1	C1	100uF/25V
4	3	C2,C5,C8	0.1uF
5	1	C3	470uF/35V
6	1	C4	3.3nF
7	2	C6,C7	0.01uF/10nF
8	1	D1	GREEN LED
9	1	D2	RED LED
10	8	D3,D4,D5,D6,D7,D8,D9,D10	1N5822/FR306
11	1	J1	2 PIN JUMPER WITH CLOSER
12	1	MG1	4 PIN SCREW TERMINAL CONNECTOR
13	1	PR1	4.7K/5K PRESET
14	3	R1,R4,R6	470E
15	1	R2	22K
16	1	R3	1.8K
17	1	R5	18K
18	2	R7,R8	0.5E, 5W - VERTICAL
19	1	U1	L297
20	1	U2	L298
21	1	SOCKET	20 PIN DIP IC SOCKET
22	1	HEATSINK	HS09045
23	4	SCREW	SC02905
24	4	STUD	ST05008
25	1	SCREW	SC02907
26	1	NUT	NT02900

J1 (Jumper) : Close - Onboard Ref
Open - External Ref
PR1 : Current Adjustment/Ref Adj
MG1 Connector : Bipolar Stepper Motor
CN1 Connector : Logic Supply 5 VDC (+V1)
CN2 Connector : Motor Supply 8-30 VDC (+V2)

CN3 Connector Pin Config :
Pin 1 - EN
Pin 2 - CON
Pin 3 - H/F
Pin 4 - CLK
Pin 5 - DIR
Pin 6 - RST
Pin 7 - SYN
Pin 8 - HOME
Pin 9 - +V1
Pin 10 - GND

CN4 Connector Pin Config :
Pin 1 - VREF
Pin 9 - +V1
Pin 10 - GND



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