

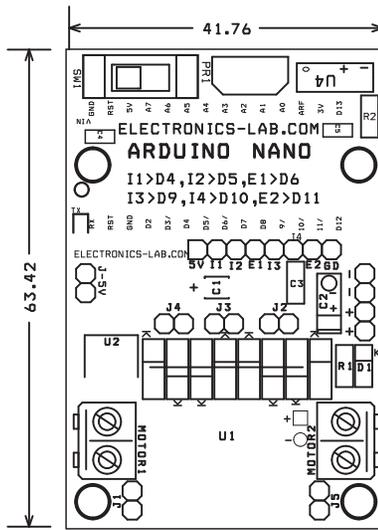
Infra-Red Robot Controller Shield For Arduino Nano

Compact Infrared robot controller is based on Arduino Nano and L298 H-Bridge. The Nano shield can be used in various DC Motor driver applications using infra-red remote or speed controller using trimmer potentiometer and direction control with help of slide switch. The board can drive two small size DC-Motors with current rating up to 1Amp each. Board also has jumpers to drive single DC Motor up to 2Amps. Additional 10K trimmer potentiometer and slide switch provided to make DC Motor speed and direction controller. The L298 IC mounted under the PCB so board can be mounted on heat sink directly in horizontal position. Screw terminal provided to connect motors. Circuit required 7-18V DC , close the Jumper J-5V to power up the Arduino Nano. Close J1, J2, J3, J4, J5, jumpers for single motor operations.

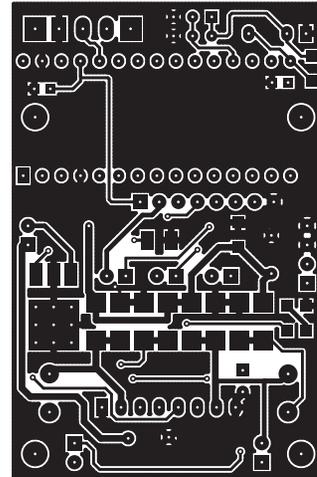
Features

- Motor supply: 7 to 18 VDC
- Output DC drive to motor: up to 2 A each (Peak) for Single Motor
- Dual DC Motor driver 1Amp each
- On Board 5V Regulator (Close J-5V to Use On Board 5V Regulator for Nano)
- Digital PWM Pins D6,D11 Connected to Enable A and Enable B of L298 for PWM Input
- Digital Pin D4,D5 Connected to I1 and I2 of L298 for Motor 1 Direction Control
- Digital Pin D9,D10 Connected to I3 and I4 of L298 for Motor 2 Direction Control
- Infra-Red Sensor Connected to Digital Pin D13 Of Arduino Nano
- Slide Switch Connected to Analog pin A7 Of Arduino Nano
- Trimmer Potentiometer Connected to Analog Pin A0 of Arduino Nano
- External Diode provided for back EMF protection
- Screw terminal connector for easy connection to Motor
- D1 Power LED
- PCB Dimensions 63.42mm X 41.76mm

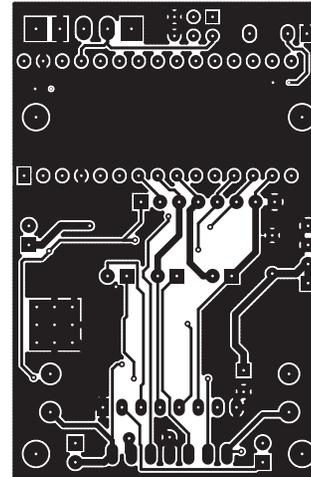




SILK Screen Top



Top Layer



Bottom Layer

PCB Dimensions 63.42mm X 41.76mm

BOM			
SR.	QNTY.	REF.	DESC.
1	8	D2-D9	1N4007
2	1	CN1	4 Pin HEADER CONNECTOR
3	1	CN2	Omit
4	1	C1	10uF/16V SMD 1210
5	1	C2	470uF/35V
6	3	C3,C4,C5	0.1uF SMD 0805
7	1	D1	GREEN LED
8	6	J1,J2,J3,J4,J5,J-5V	2 PIN JUMPER WITH CLOSUR
9	2	MG1,MG2	2 PIN SCREW TERMINAL
10	2	PR1,R2	10K TRIMMER POT VERTICAL
11	1	R1	470E SMD 0805
12	1	SW1	SLIDE SWITCH
13	1	U1	L298
14	1	U2	78M05 SMD DPAK
15	1	U3	ARDUINO NANO FEMALE
16	1	U4	TSOP1738
17	1	R2	10K SMD 0805

