

Mini Infra-Red Remote Robot Controller Shield For Arduino Nano

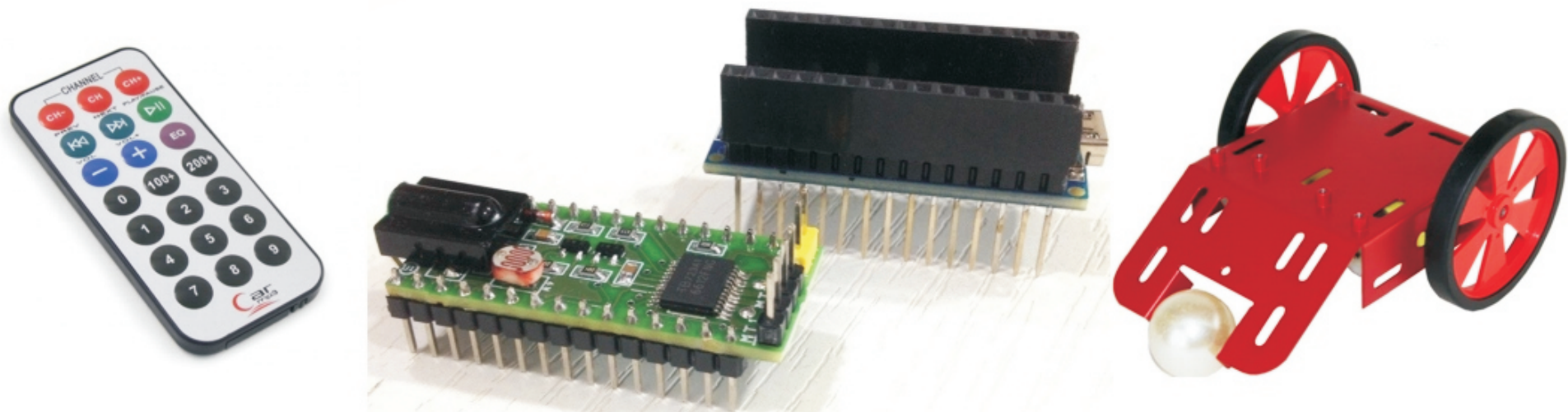
The Mini Robot Controller shield for Arduino Nano is designed to drive mini mobile robots. Low voltage DC Motor controller interface allows Infra-Red wireless control of two DC motors, two PWM and 2 Direction signal outputs to drive two motors separately. TB6612 IC is the heart of the project. IC can handle constant current up to 1.2A, Supply 6-12V DC. One LDR connected Analog pin A7 for application like light sensitive robot controller. Infra-red receiver TSOP1738 used as IR receiver which is connected to Digital pin D2 of Arduino Nano. Nano D7-Direction Motor A, D4 Direction Motor B, D5 Motor A PWM signal, D6 Motor B PWM signal.

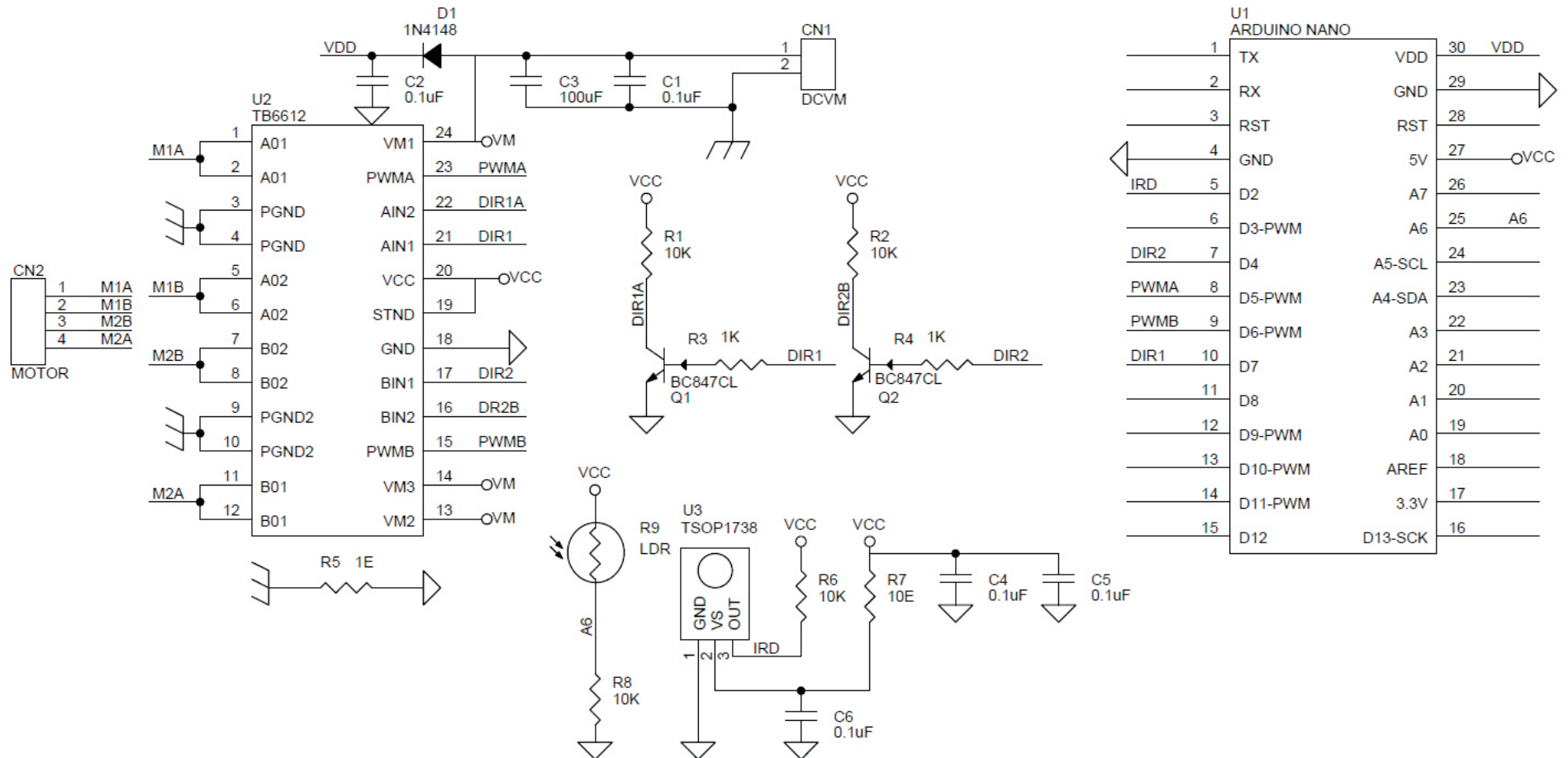
ARDUINO NANO PIN CONFIGURATION

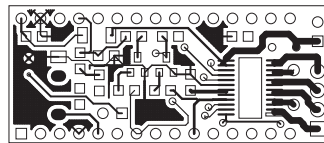
- DIGITAL PIN D2 – TSOP1738 INFRA RED RECIVER
- DIGITAL PIN D7-DIRECTION PIN OF TB6612 MOTOR-A
- DIGITAL PIN D4-DIRECTION PIN OF TB6612 MOTOR-B
- DIGITAL PIN D5-PWM PIN OF TB6612 MOTOR-A (MOTOR-1)
- DIGITAL PIN D6-PWM PIN OF TB6612 MOTOR-B (MOTOR -2)
- ANALOG PIN A7 – LDR

Features

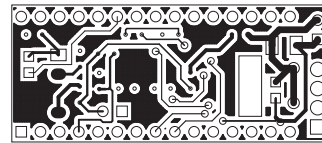
- Supply 6-12V DC
- Motor Load 1.2A
- On Board LDR for Light Sensitive Application
- TSOP1738 Infra-Red Receiver



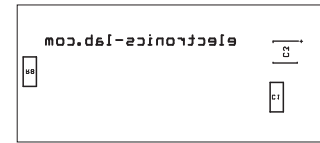




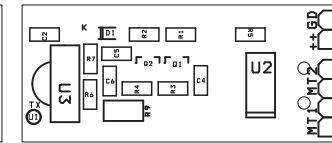
TOP



BOTTOM



SILK SCREEN BOTTOM



SILK SCREEN TOP

BOM			
SR.	QNTY.	REF.	DESC
1	1	CN1	2 PIN HEADER CONNECTOR
2	1	CN2	4 PIN HEADER CONNECTOR
3	5	C1,C2,C4,C5,C6	0.1uF SMD 0805
4	1	C3	100uF SMD 1210
5	1	D1	1N4148 SMD
6	2	Q1,Q2	BC847CL
7	4	R1,R2,R6,R8	10K SMD 0805
8	2	R3,R4	1K SMD 0805
9	1	R5	1E SMD 0805
10	1	R7	10E SMD 0805
11	1	R9	LDR MINI 5MM
12	1	U1	ARDUINO NANO
13	1	U2	TB6612 SMD
14	1	U3	TSOP1738



