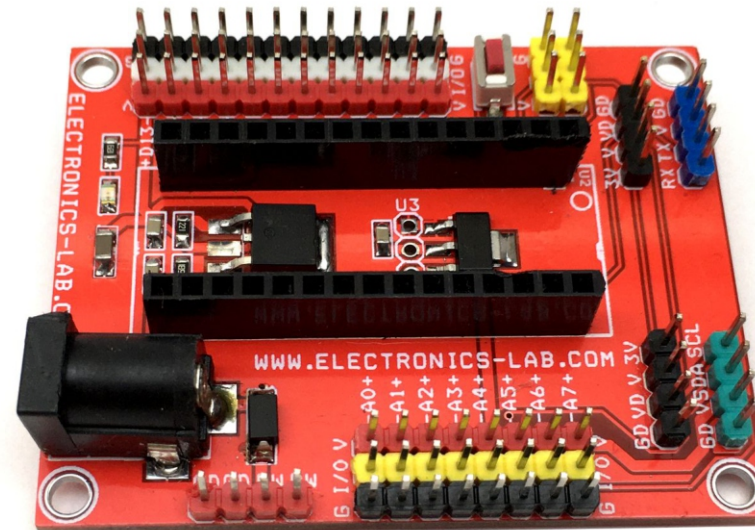


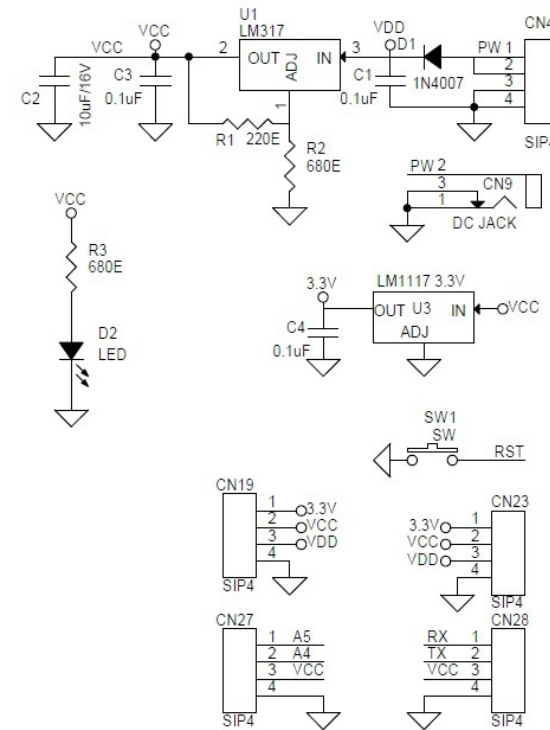
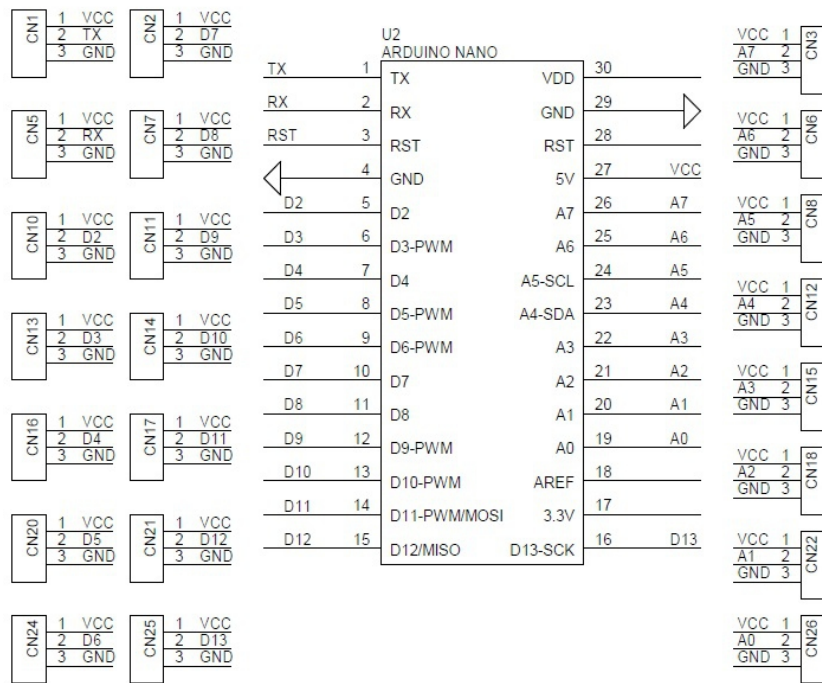
Expansion Shield-Breakout Board for Arduino Nano

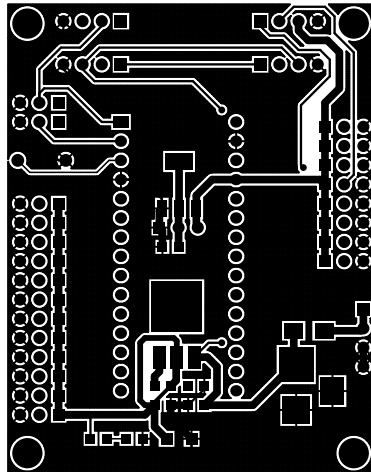
If you need to interface many devices and sensors to Arduino Nano, then, this project is for you. This is a Nano expansion I/O shield (breakout board) for the Arduino Nano. The board facilitates the easy connection between Arduino Nano and other devices. Each Arduino (I/O) Pin including the 5V DC and GND pins are available for easy connection to the sensors and other devices. The board enables the easy interface of many devices and sensors which includes various power voltage options. It provides several different options for power outputs and wide range of operating power supply input.

Features

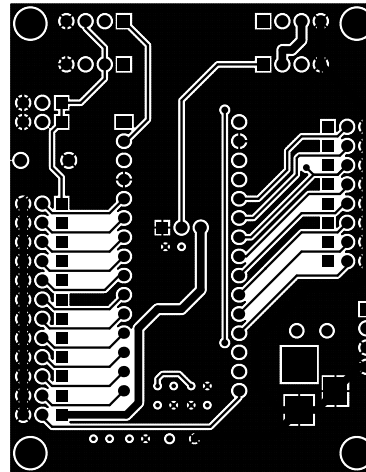
- All I/O pins including 5V DC and GND Pins (5V-I/O-GND)
- On Board TX/RX/5V/GND Connector for Serial Interface
- On Board I2C Connector (A5SCL- A4SDA-5V-GND)
- 2x Connector for Power Output: VD (Input Supply After Diode), 5V DC, 3.3V DC)
- Supply Input 7V to 24V DC Using DC Jack or Header Connector
- On Board 5V Regulator L317-Adj (Output Set to 5V)
- On Board 3.3V Regulator LM1117-3.3V
- On Board Power LED
- On Board DC Jack for Power Input 7V-24V DC
- Reverse Supply Protection Diode on Power Input
- Optional 4 Pin Header Connector for Power Input
- On Board Reset Switch
- PCB Dimensions 62.55MM X 48.90MM



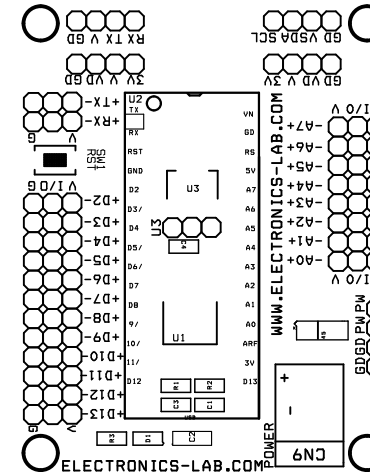




TOP LAYER



BOTTOM LAYER



SILK SCREEN TOP

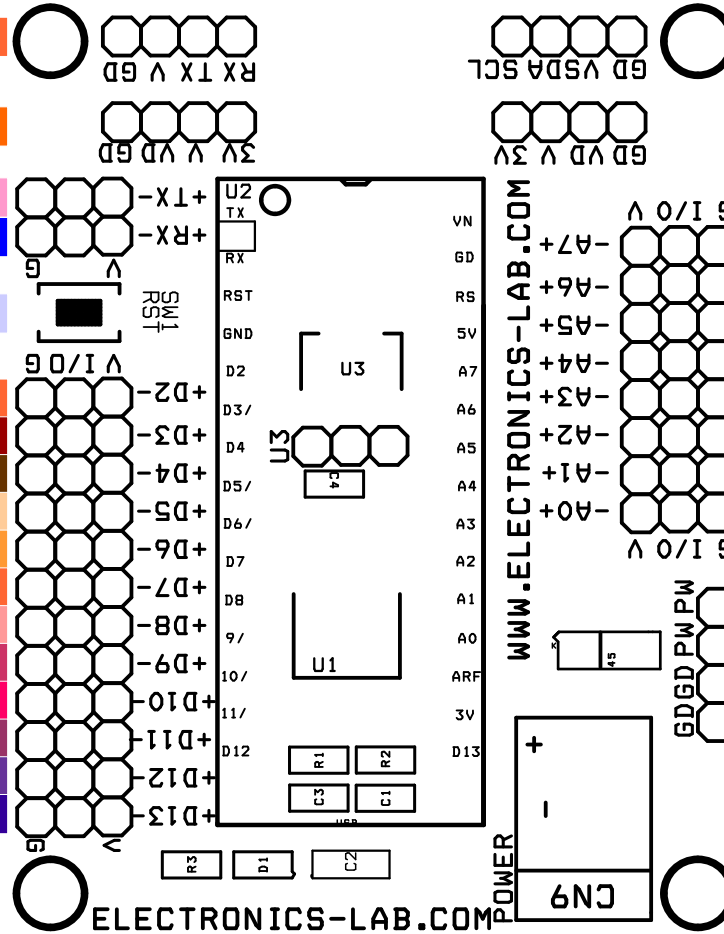
BOM				
SR.	QNTY.	REF.	DESC.	VENDOR/DIGIKEY/MOUSER
1	22	CN1 TO CN8,CN10 TO CN18,CN20,CN21,CN22,CN24,CN25,CN26	3 PIN MALE HEADER 2.54MM PITCH	DIGIKEY S1011EC-40-ND
2	5	CN4,CN19,CN23,CN27,CN28	4 PIN MALE HEADER 2.54MM PICTH	DIGIKEY S1011EC-40-ND
3	1	CN9	DC JACK	DIGIKEY 486-4186-ND
4	3	C1,C3,C4	0.1uF/50V SMD SIZE 0805	YAGEO
5	1	C2	10uF/16V SMD SIZE 1206	YAGEO
6	1	D1	1N4007 SMD	DIGIKEY 1655-1N4007FLDKR-ND
7	1	D2	LED SMD SIZE 0805	DIGIKEY 475-1415-2-ND
8	1	R1	220E 5% SMD SIZE 0805	YAGEO
9	2	R2,R3	680E 5% SMD SIZE 0805	YAGEO
10	1	SW1	TACTILE SWITCH 2PIN THT	DIGIKEY CKN12306-ND
11	1	U1	LM317 DPAK	DIGIKEY LM317MDTRKGOSCT-ND
12	1	U2	ARDUINO NANO	DIGIKEY 1050-1001-ND
13	1	U3	LM1117 3.3V	DIGIKEY LM1117MPX-3.3/NOPBCT-ND
14	2	SCKT	2X14 FEMALE HEADER 2.54MM PITCH	DIGIKEY S7012-ND





DIGITAL PINS

- GND-5V-TX-RX
- GND-VD-5V-3.3V
- GND-TX-5V
- GND-RX-5V
- RESET SWITCH
- GND-D2-5V
- GND-D3-5V
- GND-D4-5V
- GND-D5-5V
- GND-D6-5V
- GND-D7-5V
- GND-D8-5V
- GND-D9-5V
- GND-D10-5V
- GND-D11-5V
- GND-D12-5V
- GND-D13-5V



POWER LED

7V TO 24V IN

SCL-SDA-5V-GD

3.3V-5V-VD-GD

VD=INPUT SUPPLY AFTER DIODE

- 5V-A7-GND
- 5V-A6-GND
- 5V-A5-GND
- 5V-A4-GND
- 5V-A3-GND
- 5V-A2-GND
- 5V-A1-GND
- 5V-A0-GND

ANALOG PINS

- 7V TO 24V IN
- 7V TO 24V IN
- GND
- GND

