

4 Channel RF Remote Transmitter- Arduino Compatible

This is an open-source Arduino compatible board that enables you to build a 4 channel RF remote control. The project consists of an Atmega328 microcontroller, 4 tactile switches, nRF24L01 2.4Gz RF Transceiver Module, power LED, function LED, and 3.3V regulator. The operating supply is 5V DC. All switches are connected between Arduino pins and GND and they can be used with internal pull-up resistors.

Arduino Pins

- Switch 1 >> Digital Pin D2
- Switch 2 >> Digital Pin D3
- Switch 3 >> Digital Pin D4
- Switch 4 >> Digital Pin D5
- LED D1 >> Digital Pin D6

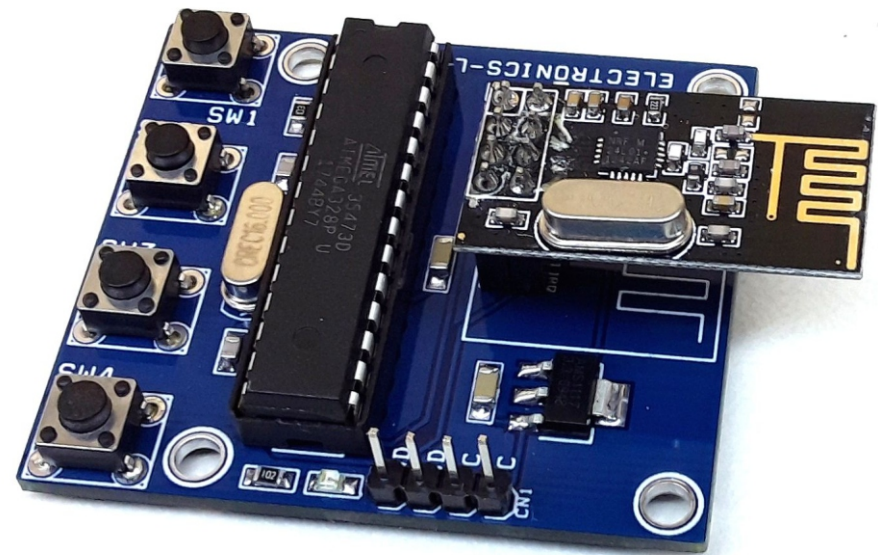
NDRF24L01 Transceiver Module

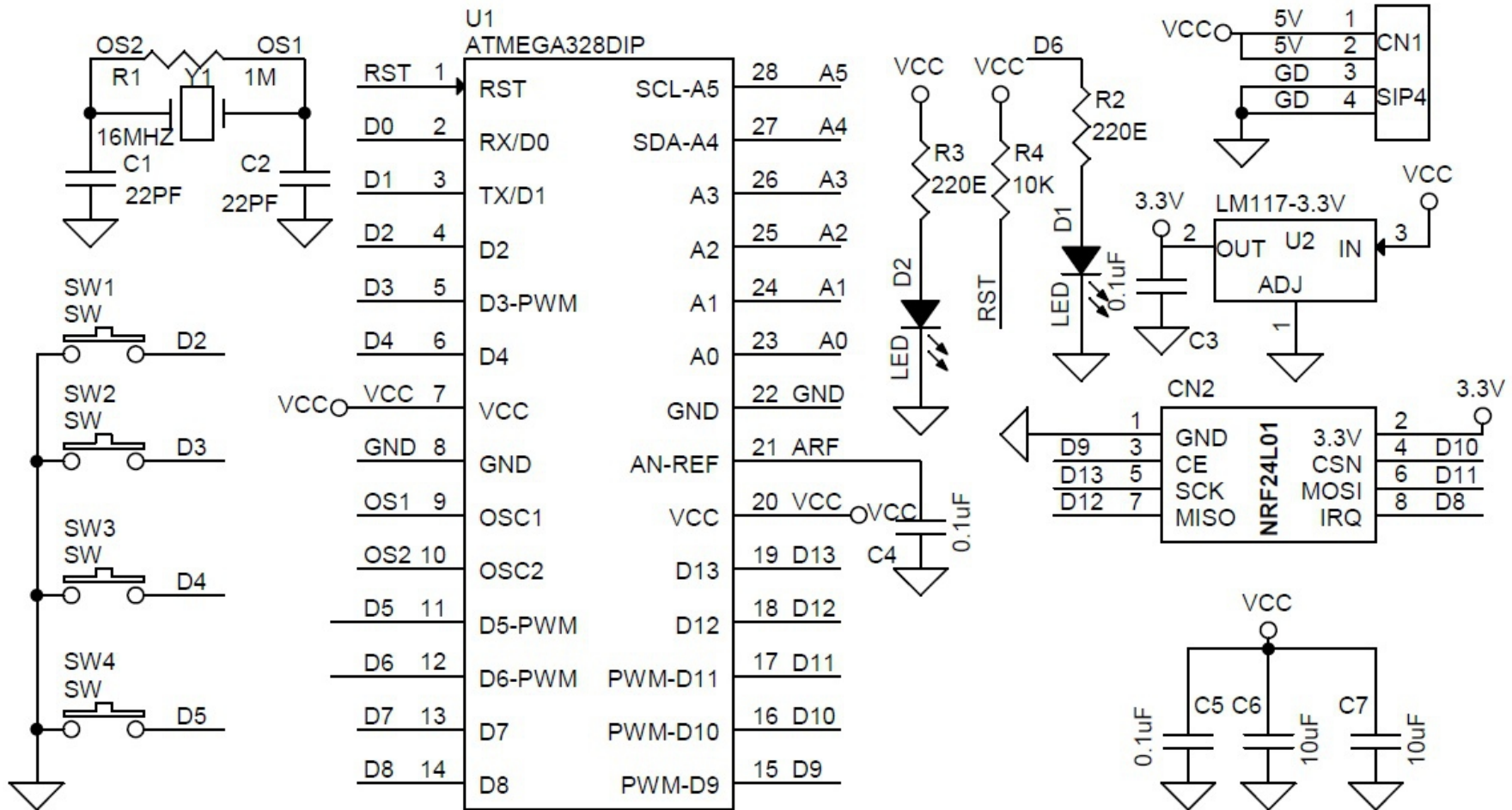
- CE >> Digital pin D9
- CSN >> Digital pin D10
- MOSI >> Digital pin D11
- MISO >> Digital pin D12
- SCK >> Digital pin D13
- IRQ >> Digital pin D8
- 3.3V and GND

Arduino code is available as a download, which will help users to test this board. Please note that it requires a 2nd Arduino to test the RX board.

A new Atmega328 microcontroller will need the Bootloader and Arduino firmware, check the link below to learn more.

<https://www.arduino.cc/en/Tutorial/BuiltInExamples/ArduinoToBreadboard>

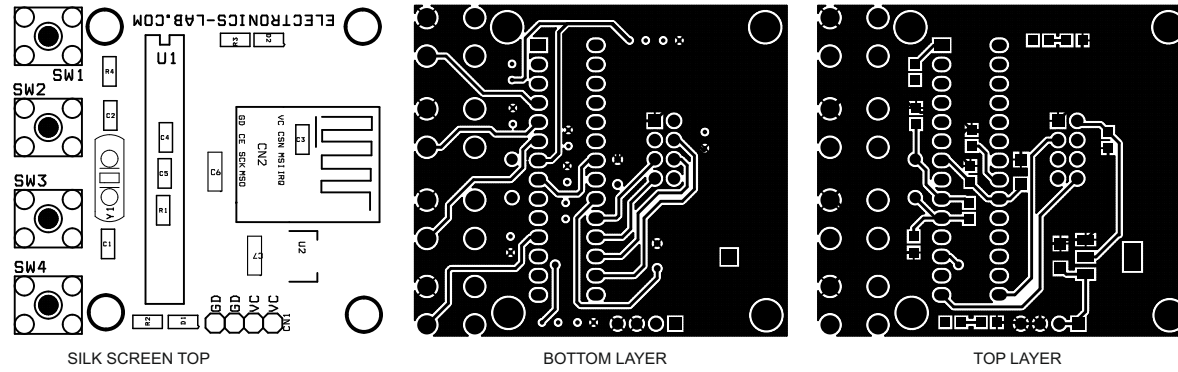






BOM						
NO	QNTY.	REF.	DESC.	MANUFACTURER	SUPPLIER	SUPPLIER PART NO
1	1	CN1	4 PIN MALE HEADER PITCH 2.54MM	WURTH	DIGIKEY	732-5317-ND
2	1	CN2	NRF24L01	SEED STUDIO	DIGIKEY	1597-1352-ND
3	2	C1,C2	22PF/50V SMD SIZE 0805	MURATA/YAGEO	DIGIKEY	
4	3	C3,C4,C5	0.1uF/50V SMD SIZE 0805	MURATA/YAGEO	DIGIKEY	
5	2	C6,C7	10uF/16V SMD SIZE 1206	MURATA/YAGEO	DIGIKEY	
6	2	D1,D2	LED RED COLUR SMD SIZE 0805	OSRAM	DIGIKEY	475-1278-1-ND
7	1	R1	1M 5% SMD SIZE 0805	MURATA/YAGEO	DIGIKEY	
8	2	R2,R3	220E 5% SMD SIZE 0805	MURATA/YAGEO	DIGIKEY	
9	1	R4	10K 5% SMD SIZE 0805	MURATA/YAGEO	DIGIKEY	
10	4	SW1,SW2,SW3,SW4	TACTILE SWITCH	C&K	DIGIKEY	CKN9085CT-ND
11	1	U1	ATMEGA328	MICROCHIP	DIGIKEY	ATMEGA328-PU-ND
12	1	U2	LM1117-3.3V	TI	DIGIKEY	LM1117MP-3.3/NOPBCT-ND
13	1	Y1	16MHZ CRYSTAL	ECS	DIGIKEY	X1103-ND
14	1	U1 SCKT	28 PIN DIP IC SOCKET		DIGIKEY	ED3050-5-ND





PCB DIMENSIONS 49.85MM X 44.29MM

