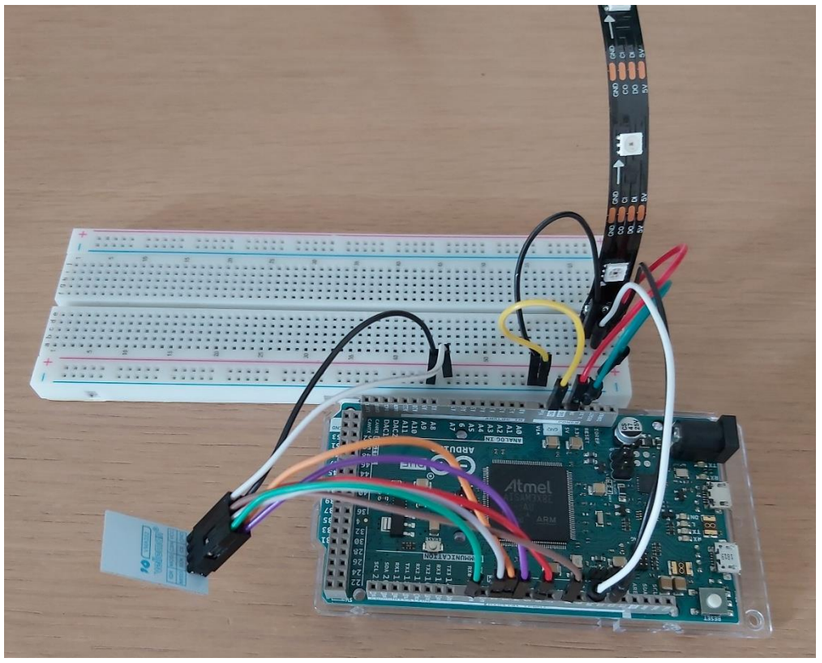
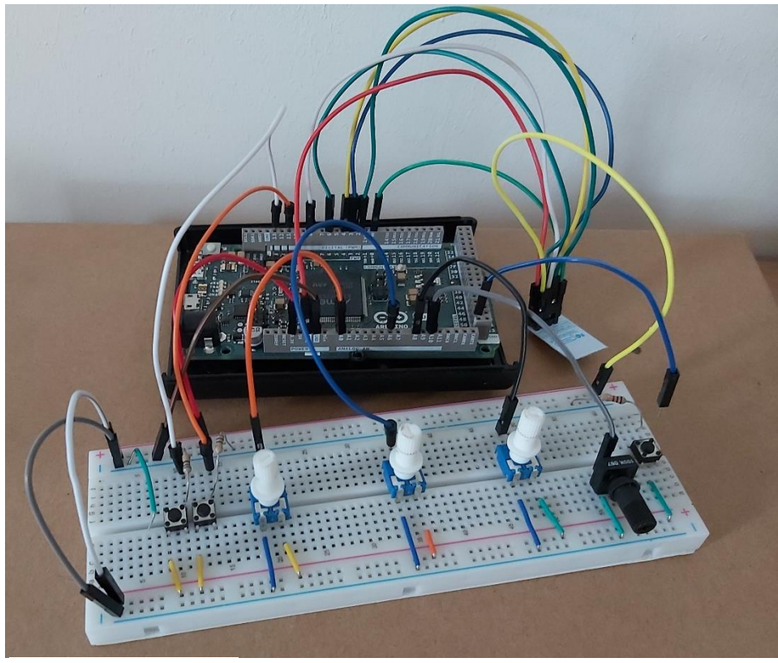
RF24L01 rf-transceiver



Figuur 6: Reciever



Figuur 5: Transmitter

The RF24L01

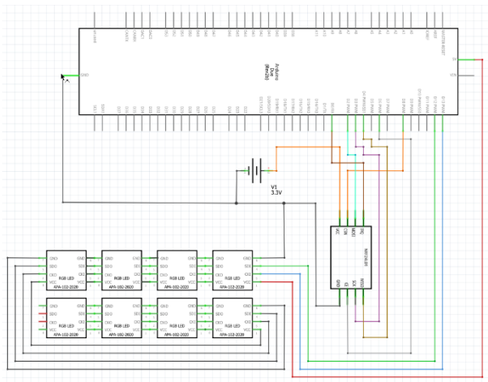
- Send and receive up to 32 on 6 pipes
- 128 rf-channels between 2400 and 2518 MHz.
- Auto-acknowlegde.
- Low-power usage
- 2 datarate modes (1 and 2 Mbps)
- 4 possible rf-outputpower (-18, -12, -6, 0 dBm)

Used hardware

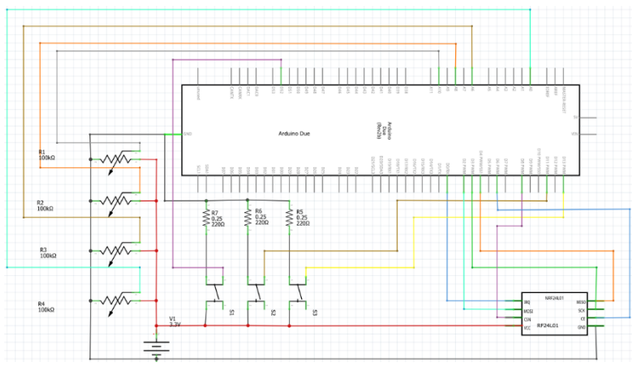
- 4 Potentiometers
- 3 pushbuttons
- 2 arduino dues
- 2 Rf24L01-module (vma322)
- 1 APA102

Possible applications

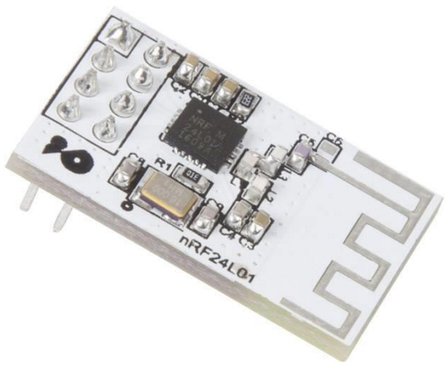
- Wireless PC peripheals
- VoIP headsets
- Game controllers
- Sports watches and sensors
- Home and commercial automation
- Active RFID



Figuur 1: Circuit schematic Reciever



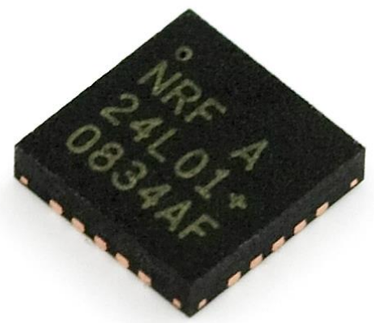
Figuur 2: Circuit schematic Transmitter



Figuur 4: VMA322 RF-transcievermodule

The library

- The library contains 1 class with 3 subclasses
  - In the subclasses are stored the values of the registers, command and the functions of the RF24L01
- In the mainclass are all the functions to read and write data to the RF24L01 and change to specific functions on the RF24L01 by changing the values in the Registers



Figuur 3: RF24L01-chip

Made by: Stephan Zaaijer

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