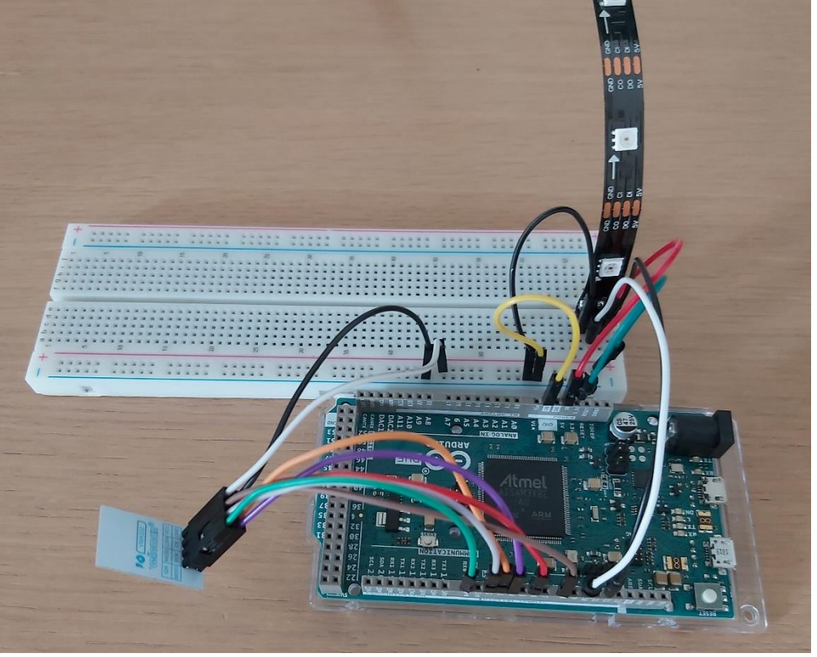
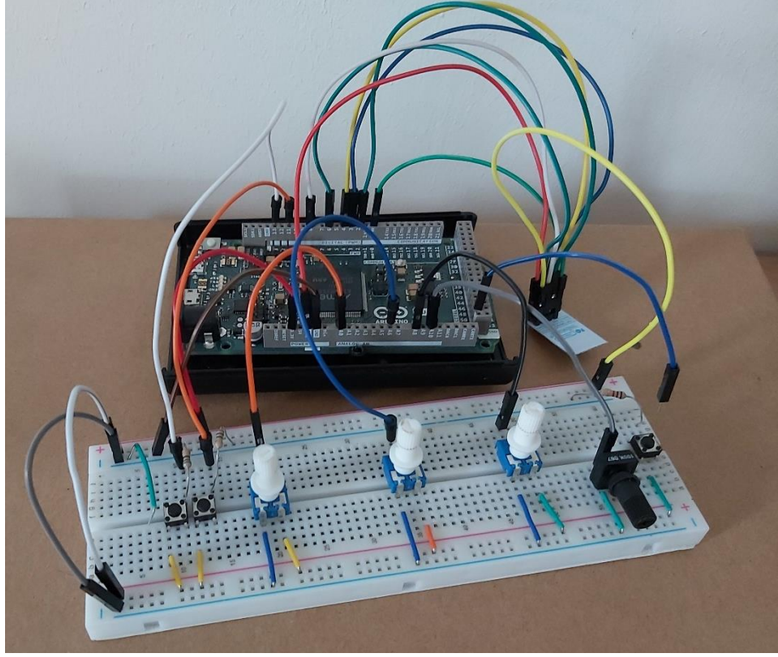
RF24L01 rf-transceiver

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)



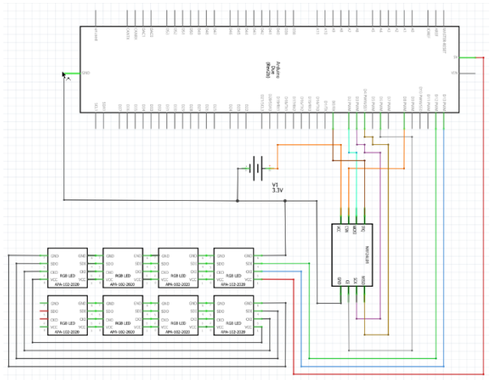
Figuur 5: Reciever



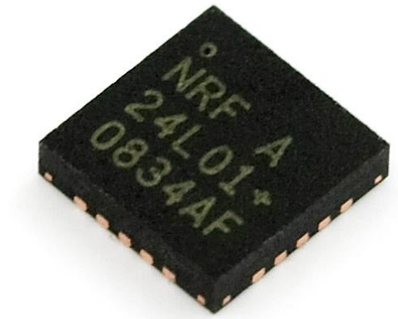
Figuur 4: Transmitter

Possible applications

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



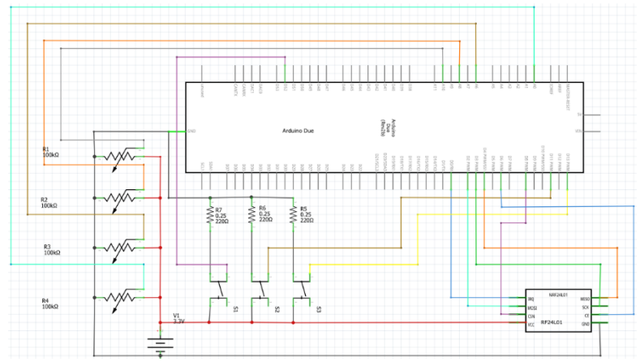
Figuur 2: Circuit schematic Reciever



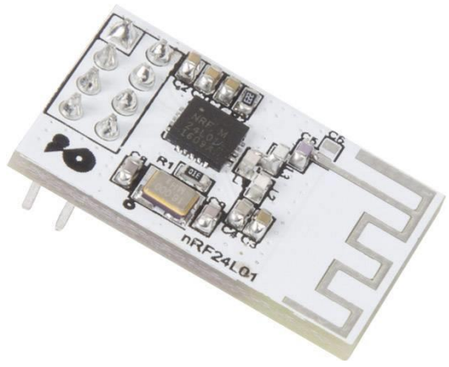
Figuur 1: RF24L01-chip

Used hardware

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



Figuur 3: Circuit schematic Transmitter



Figuur 6: 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

Library available at
https://github.com/StephanZaaijer/IPASS

Documentation available at
https://stephan.zaaijer.net/ipass.html

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