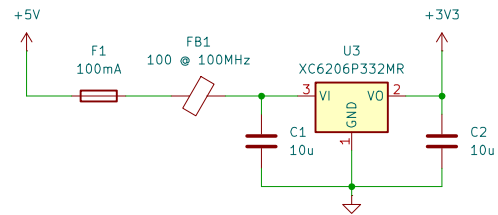
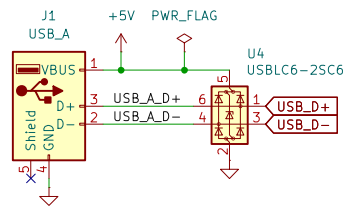


3V3 Regulator

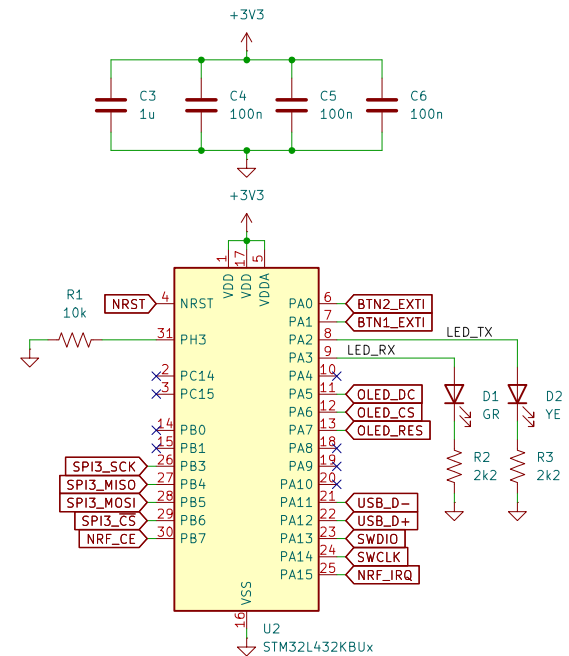
max. 200mA @ 3V3



USB connector & ESD protection

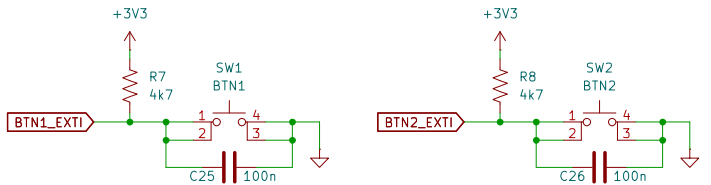


STM32 Microcontroller

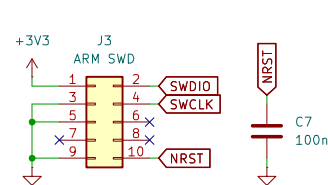


No external termination series resistors are required on USB_D+ and USB_D-. The matching impedance is already included in the embedded driver.
STM32 MCU has internal USB pull-up resistors. (AN4879)

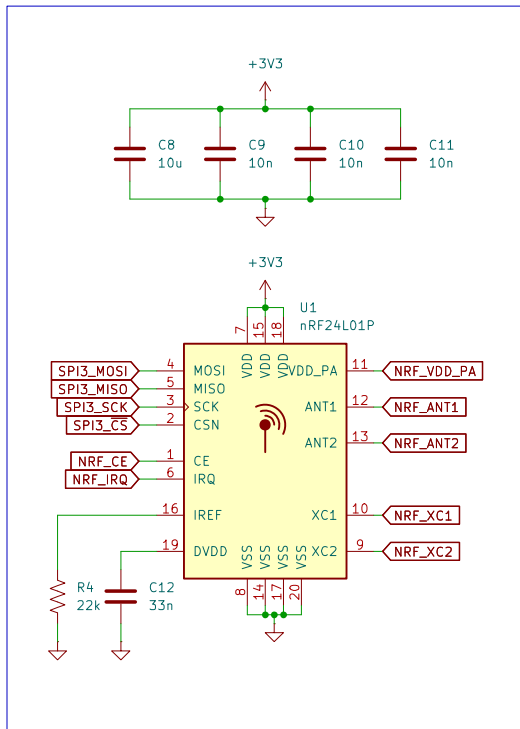
Buttons



Debug connector

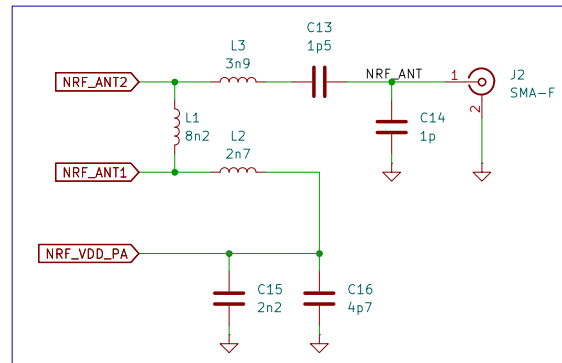


NRF24 Transceiver

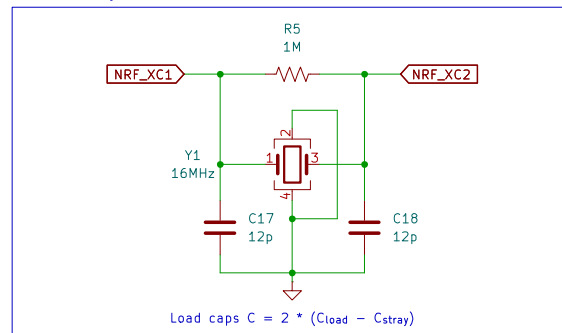


Antenna impedance matching

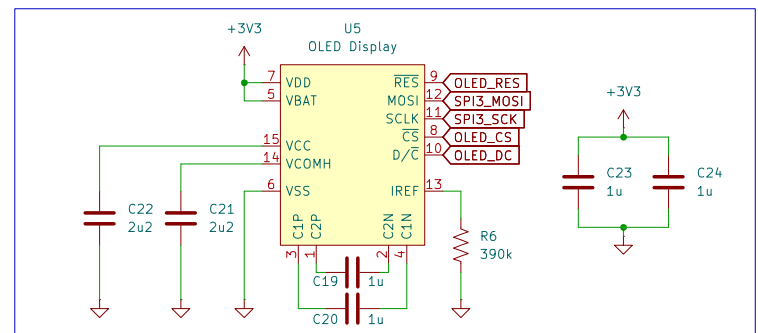
50 Ohm controlled impedance



Transceiver crystal



Load caps C = 2 * (Cload - Cstray)



Sheet: /
File: RF-to-USB.kicad_sch

Created by: Remi De Coster
www.reemi.be

Title: STM32-based RF-to-USB dongle

Size: A4
KiCad E.D.A. 9.0.0

Date: 2025-03-10
Rev: 0
Id: 1/1