

Napájení MCU

U1B
STM32F103C8T6LQFP48_STM

2 of 2

VSS_1
VSS_2
VSS_3
VSSA
VBAT
VDDA
VDD_3
VDD_2
VDD_1

23
35
47
8

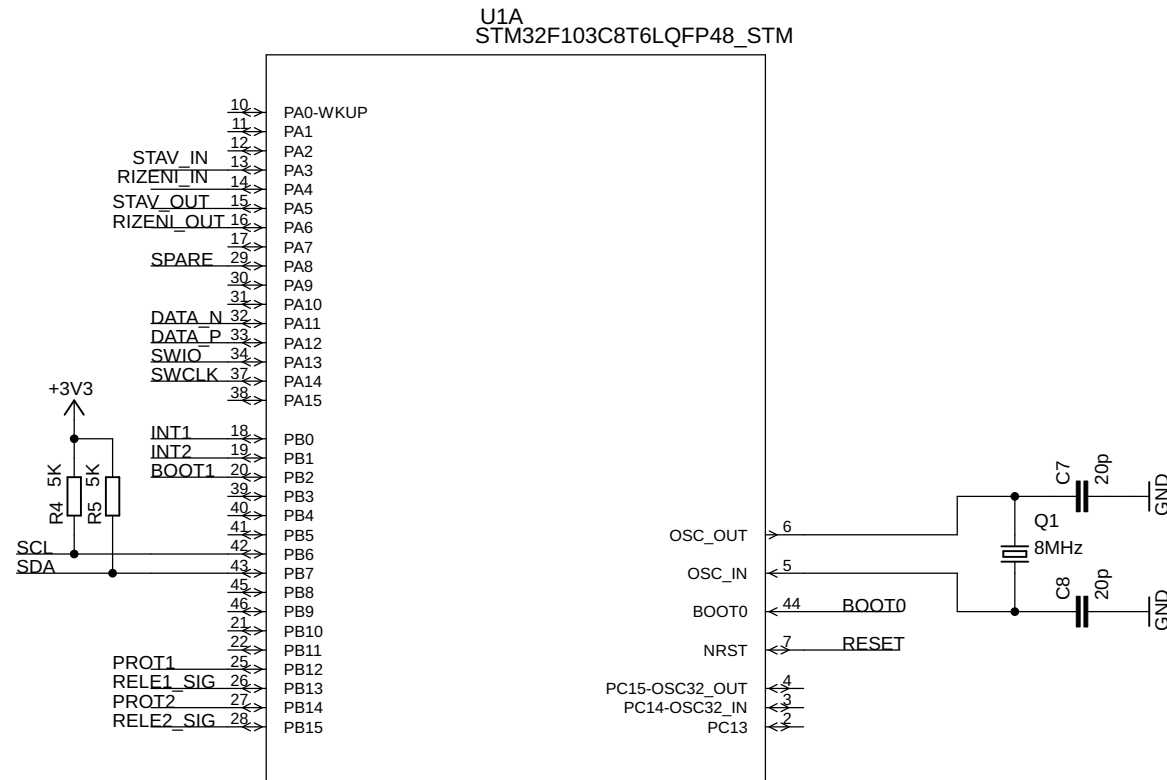
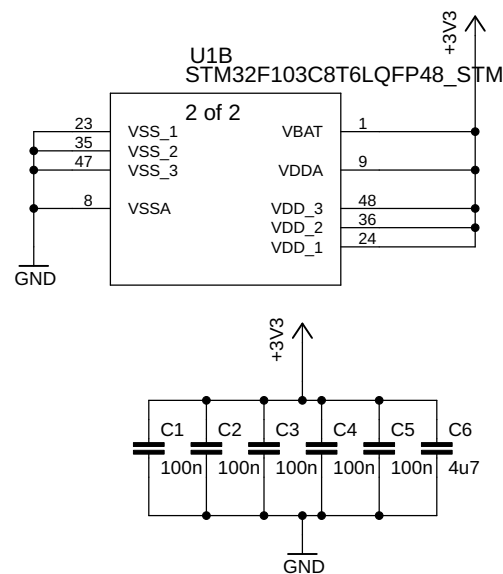
GND

+3V3

1
9
48
36
24

C1
100n
C2
100n
C3
100n
C4
100n
C5
100n
C6
4u7

GND



Ovládání relé kruhových bočníků

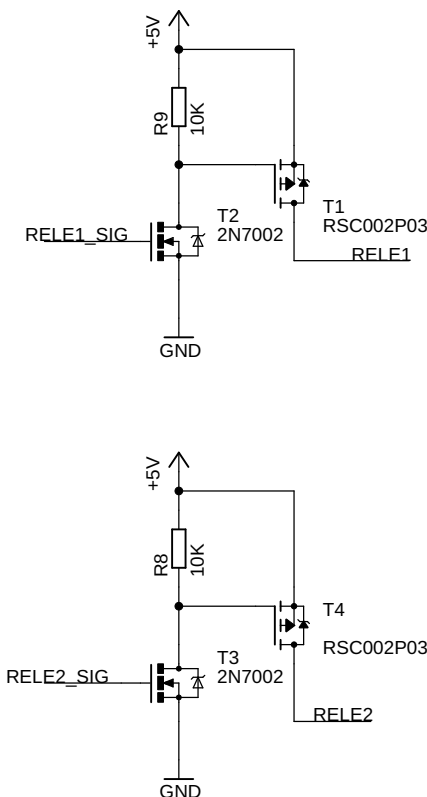
The image contains two identical circuit diagrams, one for RELE1 and one for RELE2. Each diagram shows a +5V power supply connected to a 10K resistor (R0 or R8). The other end of the resistor is connected to the gate of a MOSFET (T2 or T3, 2N7002). The source of the MOSFET is connected to GND. The drain of the MOSFET is connected to the coil of a relay (T1 or T4, RSC002P03). The other end of the relay coil is connected to GND. The signal input to the gate of the MOSFET is labeled RELE1_SIG or RELE2_SIG.

Top Circuit (RELE1):

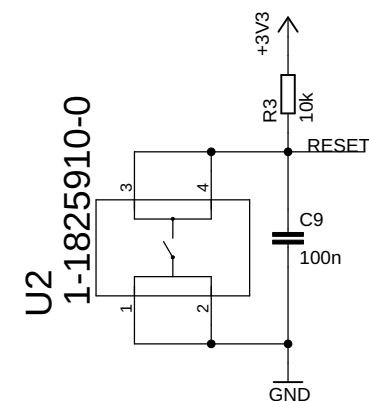
- Power supply: +5V
- Resistor: R0, 10K
- MOSFET: T2, 2N7002
- Relay: T1, RSC002P03
- Signal input: RELE1_SIG
- Output: RELE1

Bottom Circuit (RELE2):

- Power supply: +5V
- Resistor: R8, 10K
- MOSFET: T3, 2N7002
- Relay: T4, RSC002P03
- Signal input: RELE2_SIG
- Output: RELE2

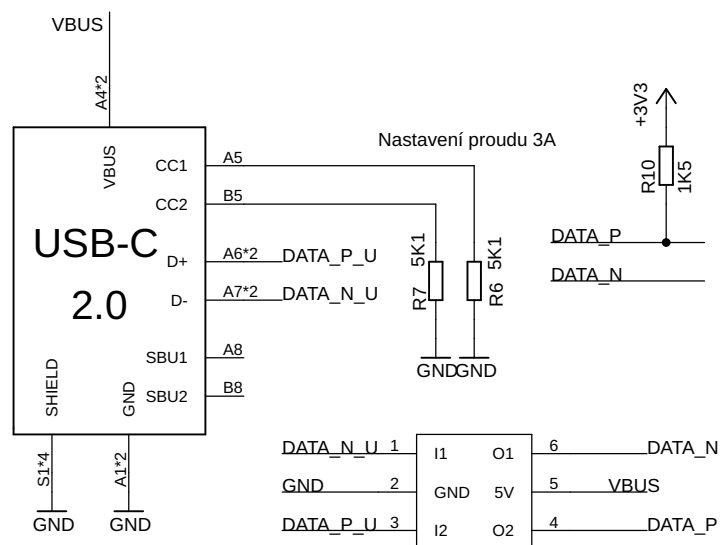


The diagram illustrates the RESET pin configuration for the 1-1825910-0 component. The RESET pin is connected to a pull-up resistor R3 (10k) leading to a +3V3 supply and a capacitor C9 (100n) connected to ground. The component U2 is shown with pins 1, 2, 3, and 4, with a switch symbol between pins 3 and 4.

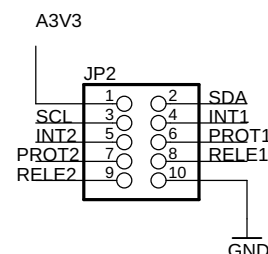


USB port

The diagram illustrates the electrical connections for a USB-C port. On the left, a USB-C connector is shown with pins labeled: VBUS, CC1, CC2, D+, D-, SBU1, SBU2, SHIELD, and GND. The VBUS pin is connected to a 4x2 pin header (A4*2). The SHIELD pin is connected to a 4x1 pin header (S1*4) which is grounded. The GND pin is connected to a 4x2 pin header (A1*2) which is grounded. The D+ pin is connected to pin A6*2 of a 6-pin header, which is also labeled DATA_P_U. The D- pin is connected to pin A7*2 of the same 6-pin header, labeled DATA_N_U. The SBU1 pin is connected to pin A8 of an 8-pin header. The SBU2 pin is connected to pin B8 of the same 8-pin header. The CC1 and CC2 pins are connected to pins A5 and B5 of a 6-pin header. A note "Nastavení proudu 3A" (Set current 3A) points to these pins. Pins A5 and B5 are connected to a 5K1 resistor (R7) and a 5K1 resistor (R6) respectively, both of which are grounded. To the right, a microcontroller is shown with pins: 1 (DATA_N_U), 2 (GND), 3 (DATA_P_U), 6 (DATA_N), 5 (VBUS), and 4 (DATA_P). A 3V3 voltage source is connected to pin 6 (DATA_N) through a 1K5 resistor (R10). The VBUS pin (5) is connected to the VBUS line. The DATA_P pin (4) is connected to the DATA_P line. The DATA_N pin (6) is connected to the DATA_N line.

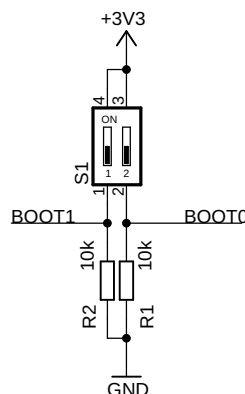
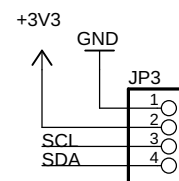


Konektor analogové desky



Wiring diagram for the OLED module:

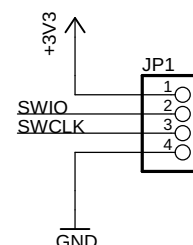
- Pin 1 of JP3 is connected to +3V3.
- Pin 2 of JP3 is connected to GND.
- Pin 3 of JP3 is connected to SCL.
- Pin 4 of JP3 is connected to SDA.



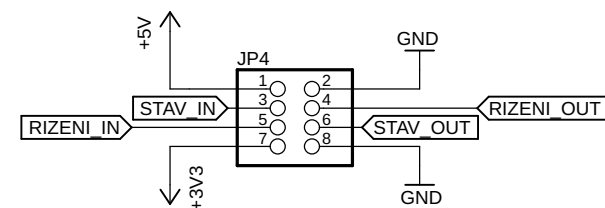
Programovací konektor

The diagram illustrates the programming connector JP1. It is a 4-pin connector with pins numbered 1 to 4. The connections are as follows:

- Pin 1: +3V3
- Pin 2: SWIO
- Pin 3: SWCLK
- Pin 4: GND



Konektor ochran

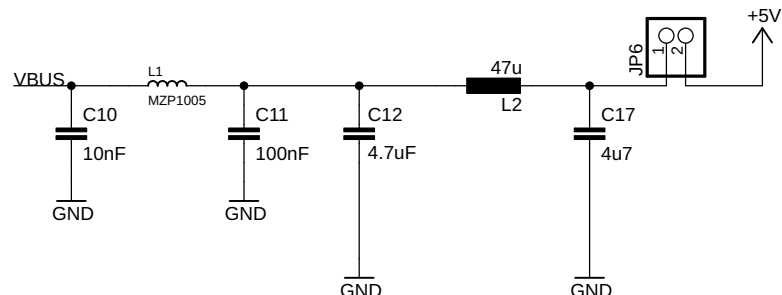


Vstupní filtr

V případě osazení L2 je R11 ponechán neosazený

The diagram illustrates an input filter circuit for a +5V supply. The circuit components and their connections are as follows:

- VBUS**: The input voltage source.
- C10**: A 10nF capacitor connected to **GND**.
- L1**: An inductor (MZP1005) connected in series.
- C11**: A 100nF capacitor connected to **GND**.
- C12**: A 4.7uF capacitor connected to **GND**.
- L2**: An inductor (47uH) connected in series.
- C17**: A 4u7 capacitor connected to **GND**.
- JP6**: A component (likely a jumper or connector) connected to the output line.
- +5V**: The output voltage.



LDO regulátor

alternativně TLV76133DCYR

The image displays two circuit diagrams for LDO regulators. The left diagram features a TLV76133DCYR (U\$2) with a 470nF input capacitor (C14) and a 2uF output capacitor (C13), regulated from +5V to +3V3. The right diagram features an AZ1117 (U\$3) with a 470nF input capacitor (C16) and a 2uF output capacitor (C15), regulated from +5V to A3V3.

