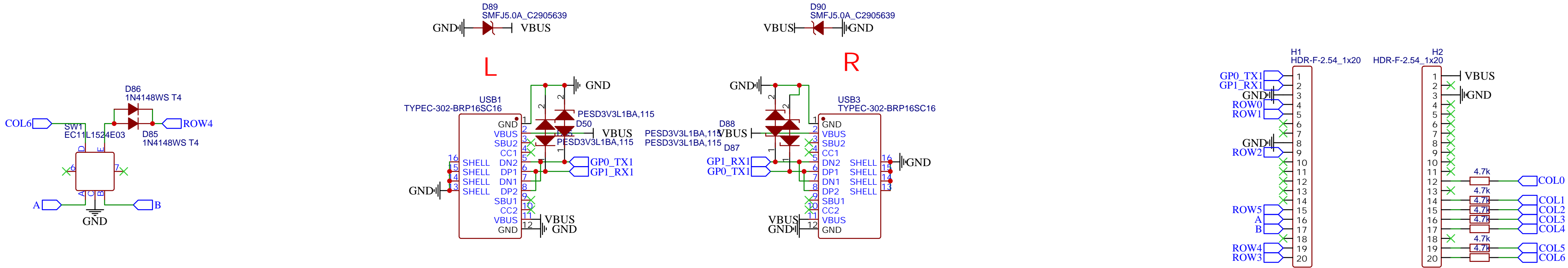


All document translations are completed by ChatGPT and are for reference only.



TVS and ESD diodes are optional, not mandatory. However, it is still recommended to solder them.  
The sub-board is powered through VBUS, sharing the current.  
reverse polarity protection is implemented using the onboard Schottky diode (which is unlikely to be used).

The PC has a TVS diode, so you can purchase a Raspberry Pi Pico without a TVS diode  
You can independently connect three TVS diodes, pointing from GND to TX, RX, and VBUS.

The actual communication is cross-connected: the TX on the left is connected to the RX on the right, and the TX on the right is connected to the RX on the left.

