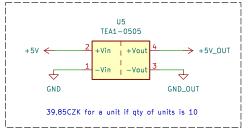
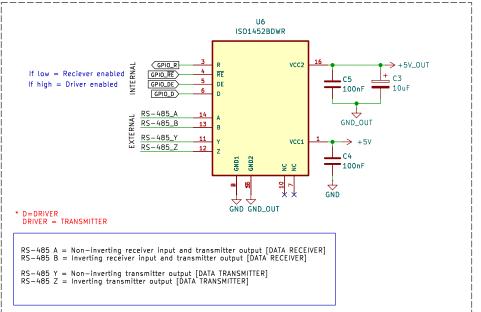
# ISOLATED DC-DC CONVERTER



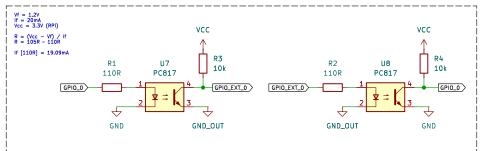
## OVERVOLTAGE PROTECTION

## **ISOLATED RS-485 TRANSCEIVER**



## **REVERSE POL. PROTECTION**

## **GPIO OPTOCOUPLERS**



1. Q: Do we need 5V or 3.3V? IO voltage of a RPi is 3.3V.
2. Q: Do we want the external power pin to be bi-directional? (both power input and power output).
3. Q: Are we using half-duplex RS-485 communication (2-wire) or full-duplex (4-wire)
4. Q: Do we want RS-485 to be bidiractional?
5. Q: []

RS-485 max speed is 10Mb/s

Made by bismarx-v1 CONTACT: Savva Popov, savva.popov.sp@gmail.com, +420 605 570 366 Made in Prague, Czech Republic INSET.CZ

Sheet: /

File: IoTGW Isolation.kicad sch

Title: IoTGW Galvanic isolation

Size: A4 Date: 2025-01-11 Rev: v1.0.0 KiCad E.D.A. 8.0.3 ld: 1/1