

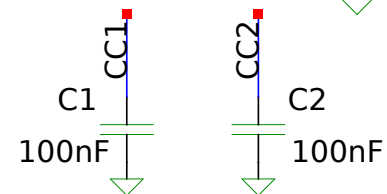
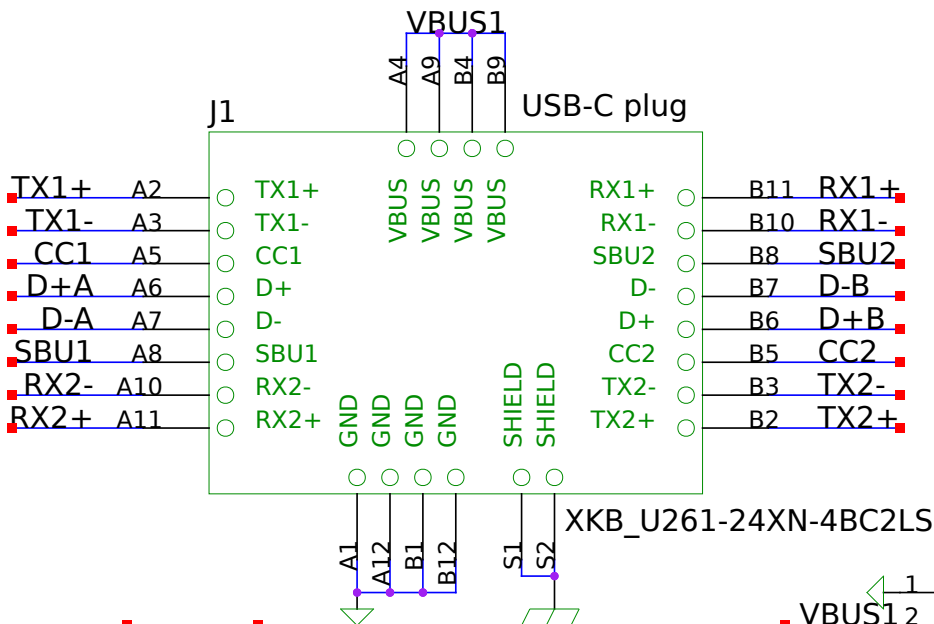
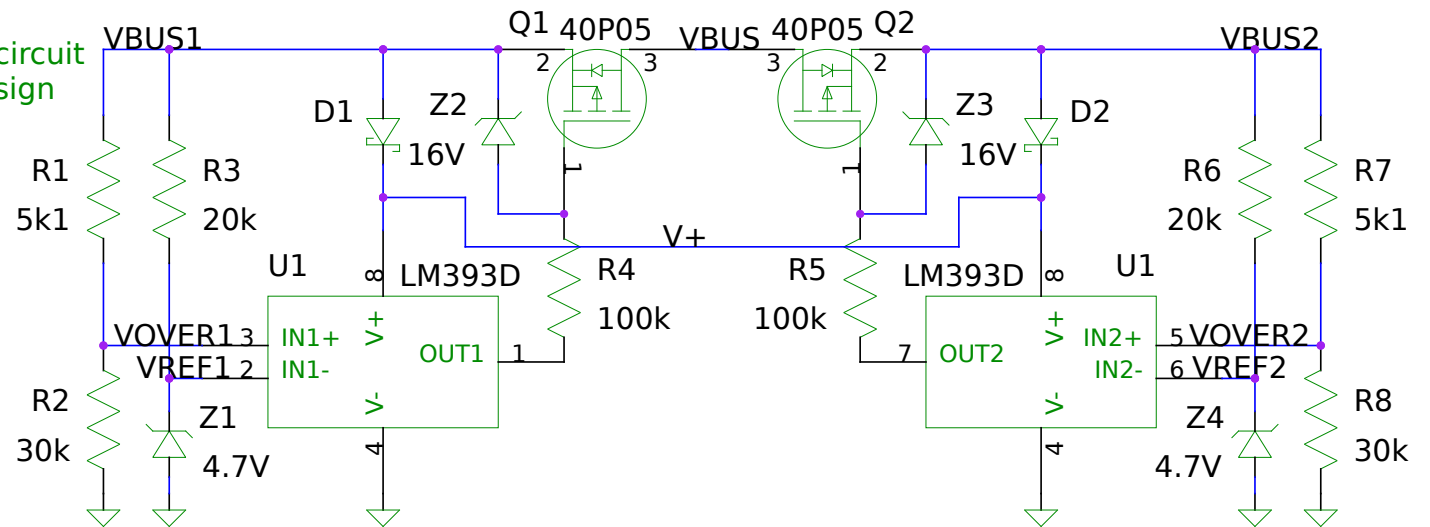
Over-Voltage protection with comparator circuit based on Texas Instruments SNOAA20 design

$V_{gs} \leq \pm 20V$

$\text{divider_ratio} = V_{ref} / V_{over}$
 $\text{divider_ratio} = 4.7 / 5.5 = 0.8545$

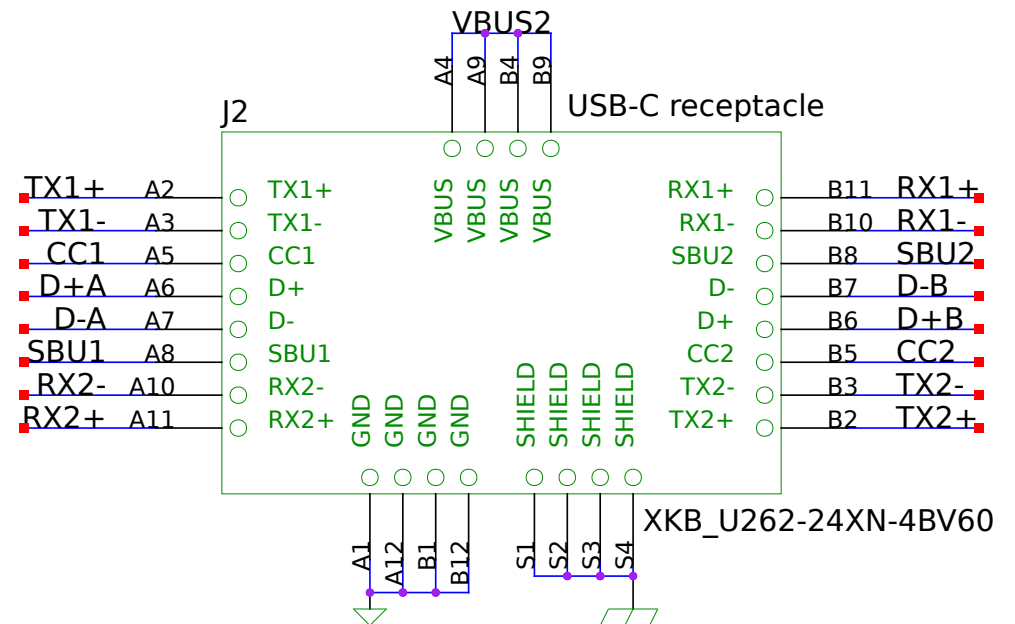
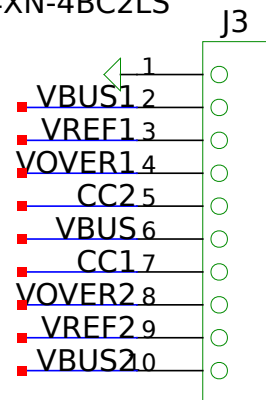
$R2/(R1+R2) = 30/(5.1+30) = 0.8547$

$R3 \leq (V_{supply_min} - V_{zener}) / I_{leakage}$
 $R3 \leq (4.75 - 4.7) / 2E-6 = 25k$



capacitors block PD communication by smoothing out the 300 Kpbs signal, but still permits Rx identification

DEBUG



TITLE:

USB-C Power Delivery blocker

DATE: 2022-03-23

ORGANISATION: CuVoodoo

VERSION: 0

AUTHORS: King Kévin

REVISION: 3 (6d803b2)

LICENCE: CERN-OHL-S