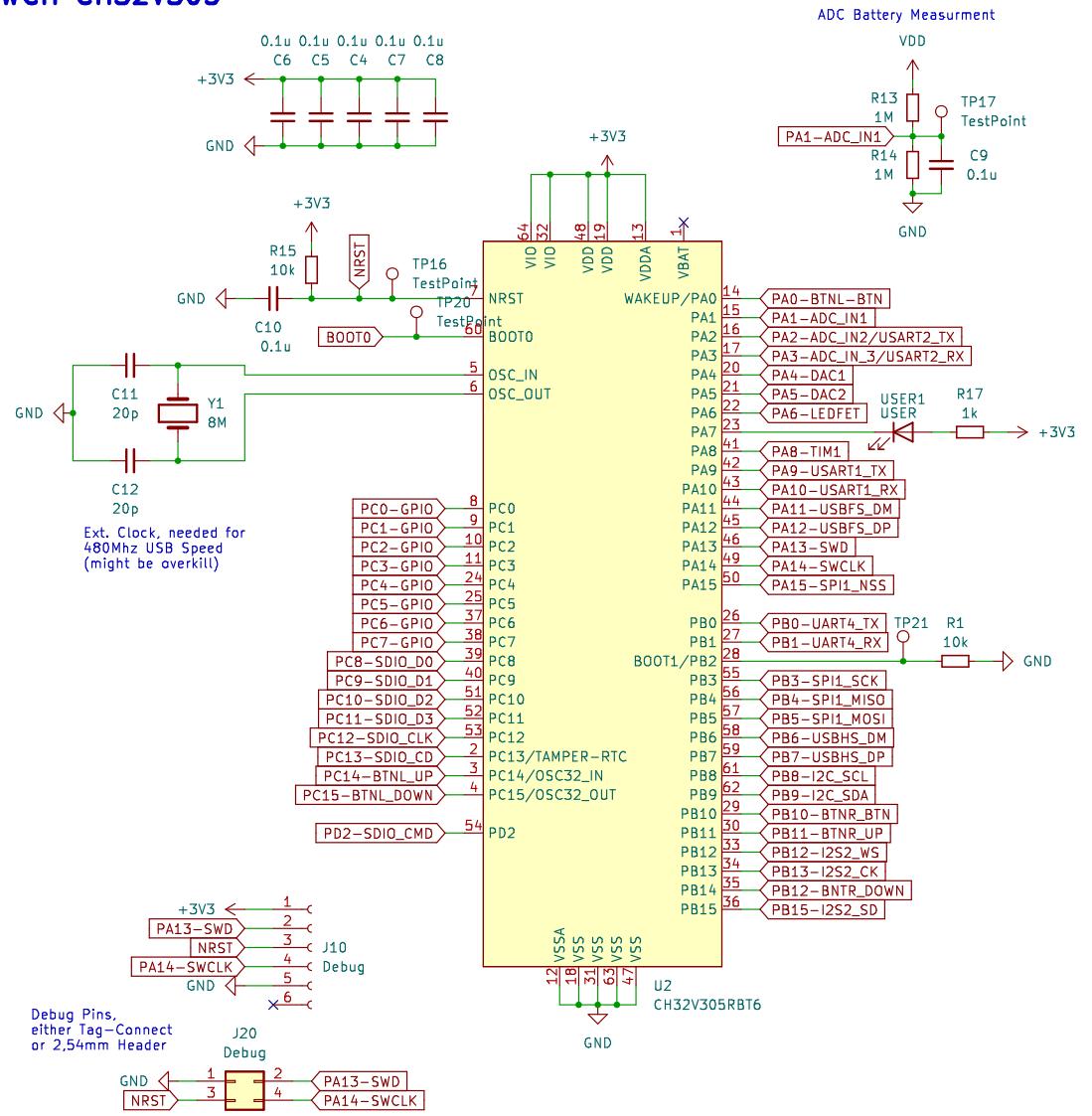
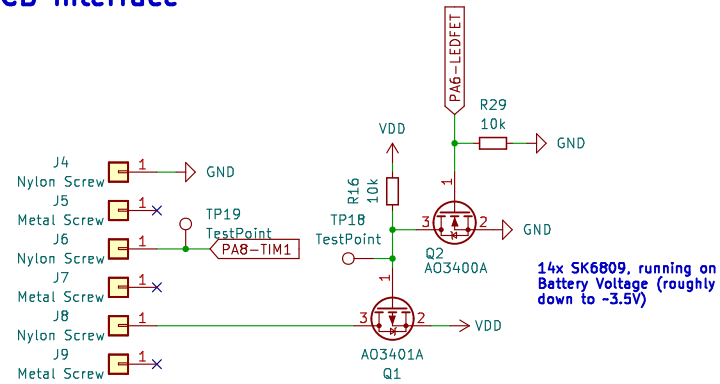
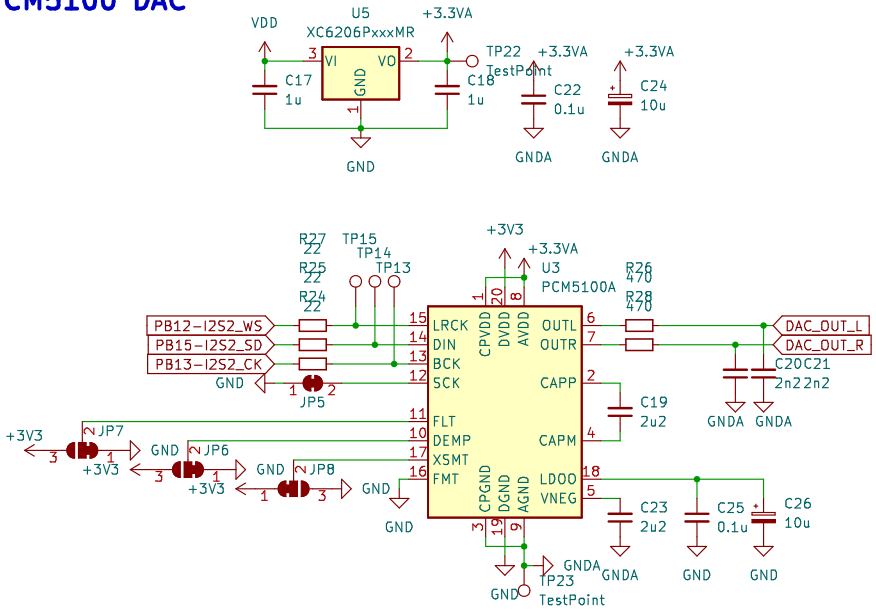
WCH CH32V305



Top Badge PCB Interface



PCM5100 DAC



BadeLink

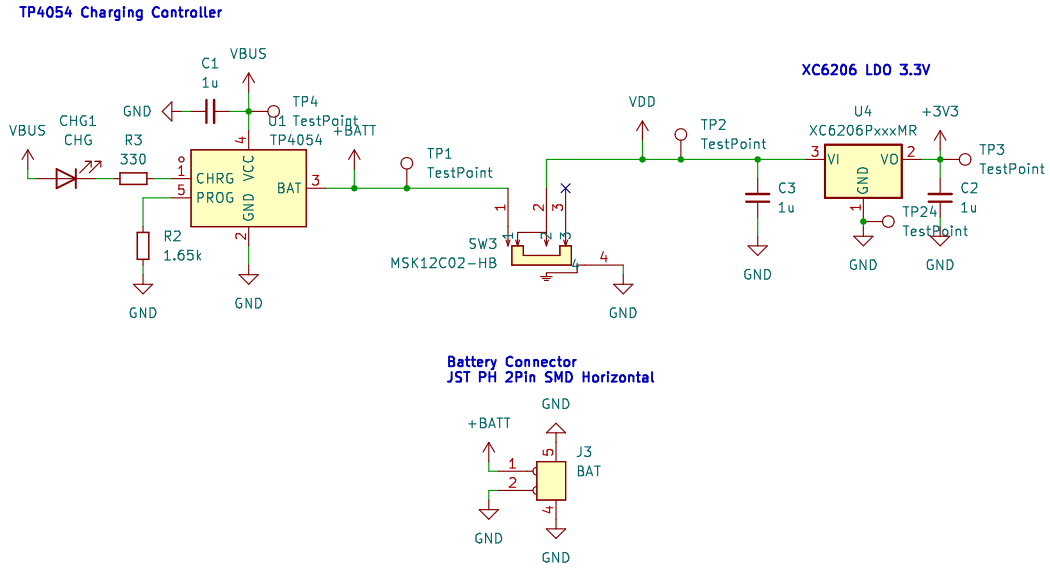
File: badgelink.kicad_sch

IO

File: io.kicad_sch

Power

File: power.kicad_sch



Power Section

Unterland

Sheet: /Power/

File: power.kicad_sch

Title: Unterland Badge Bottom

Size: A4	Date: 2023-07-29	**Rev: 1**
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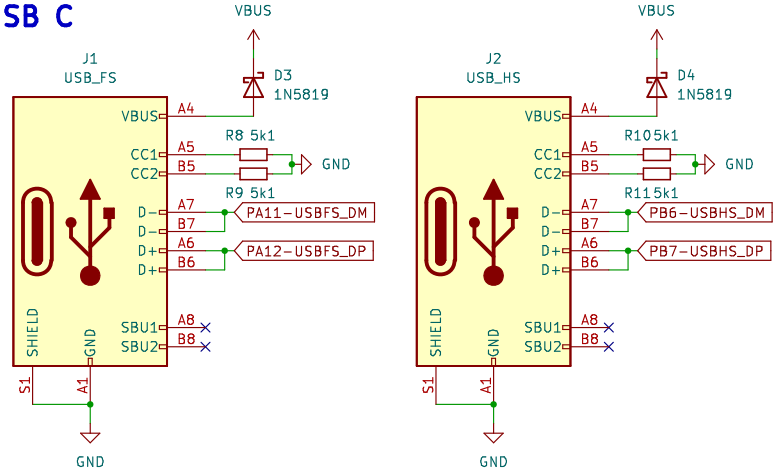
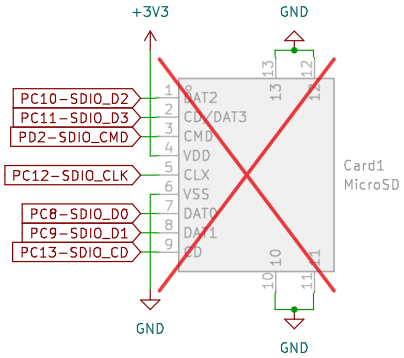
USB C

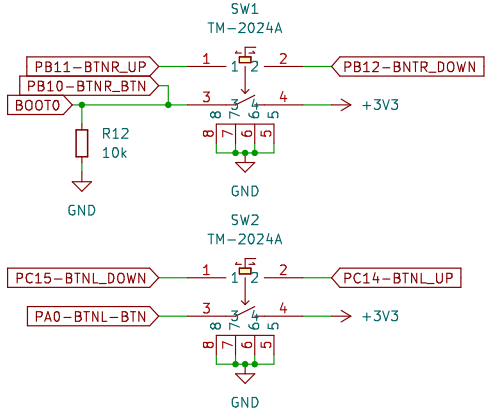


Micro SD

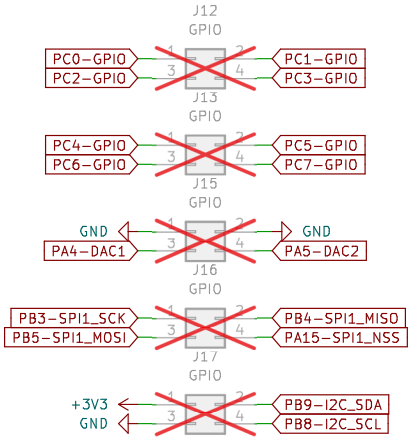


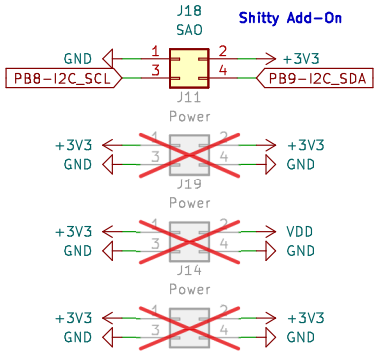
Buttons

Right Switch (SW1) center button also connects BOOT0 to GND, setting CH32 into Download Mode



GPIO Expansion





IO Section
Unterland

Sheet: /IO/
File: io.kicad_sch

Title: Unterland Badge Bottom

Size: A4	Date: 2023-07-29	**Rev: 1**
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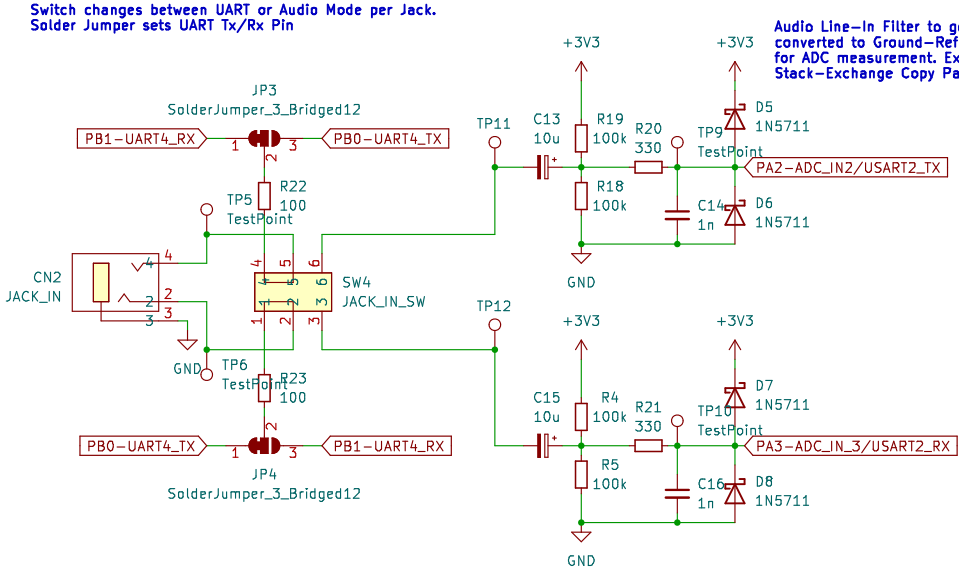
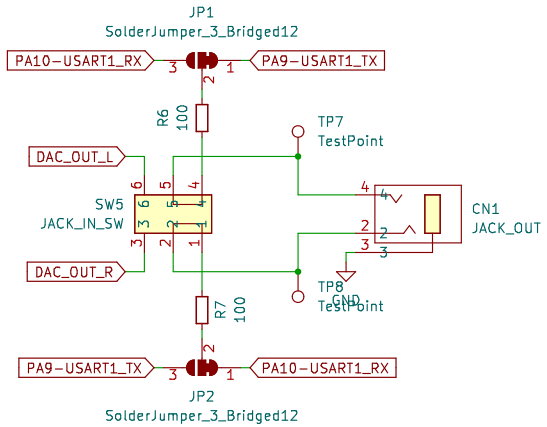
BadgeLink

Switch changes between UART or Audio Mode per Jack.
Solder Jumper sets UART Tx/Rx Pin



Audio Line-In Filter to get -1V/1V Feed converted to Ground-Referenced Voltage for ADC measurement. Experimental Stack-Exchange Copy Pasta o.o



UART has no protection besides 100Ω safety resistor.
Make sure to set Switch before inserting Jack!

BadgeLink Expansion Section
Unterland

Sheet: /BadeLink/
File: badgelink.kicad_sch

Title: Unterland Badge Bottom

Size: A4	Date: 2023-07-29	**Rev: 1**
KiCad E.D.A. kicad 7.0.6		Id: 4/4