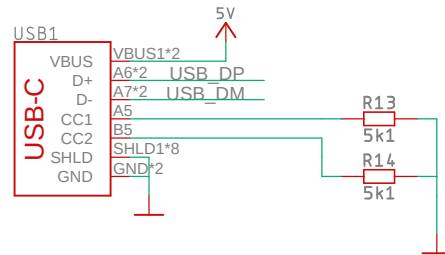
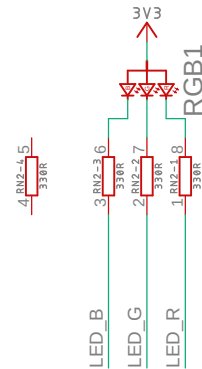


Picade Max USB Audio (PIM742)

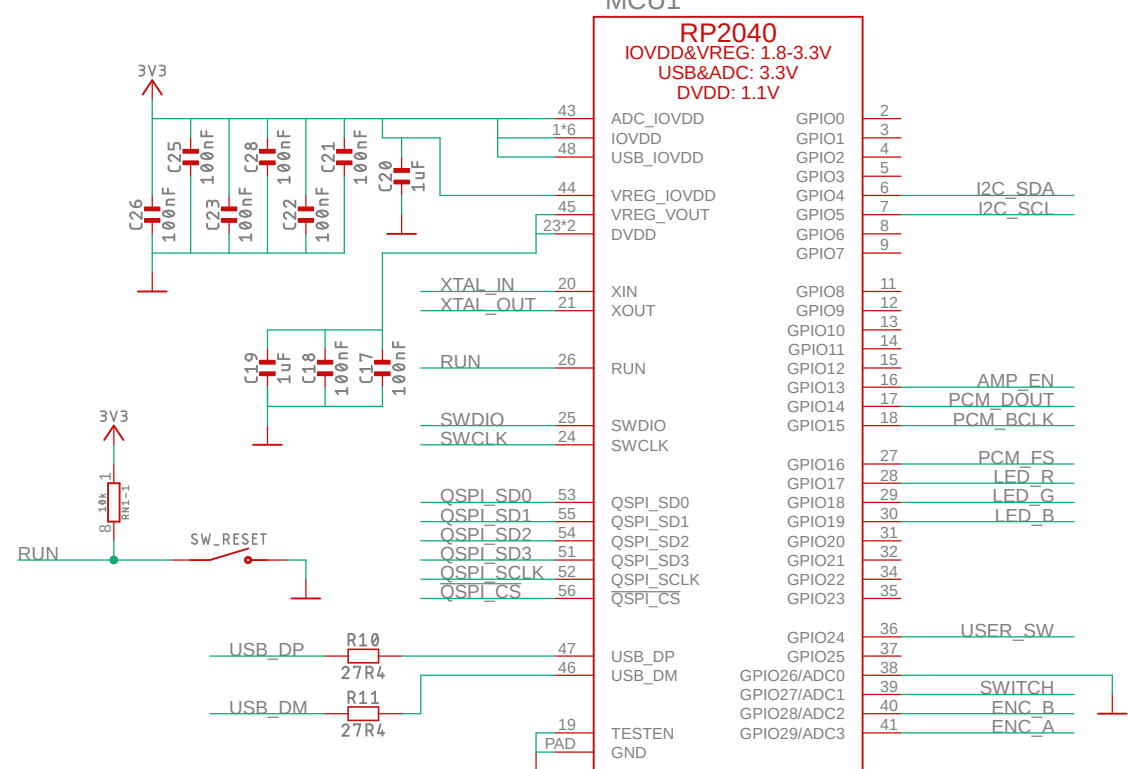
USB-C connector



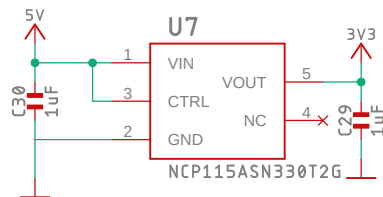
RGB LED



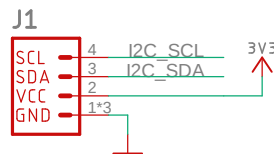
RP2040 MCU



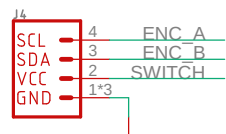
LDO



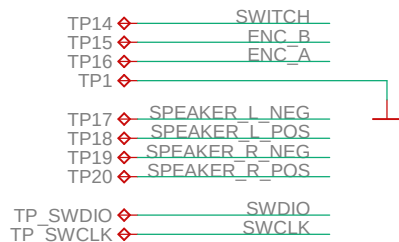
QW/ST connector



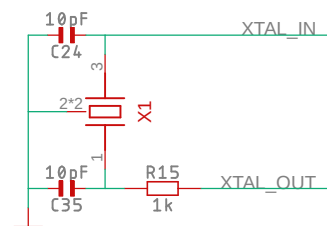
Volume control header



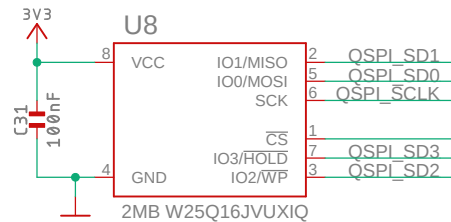
Test pads



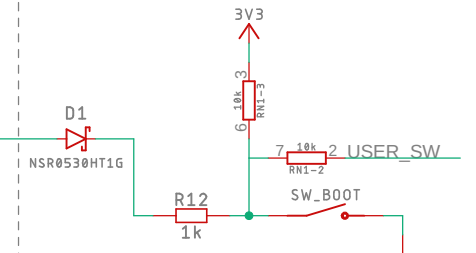
Crystal oscillator



Flash memory

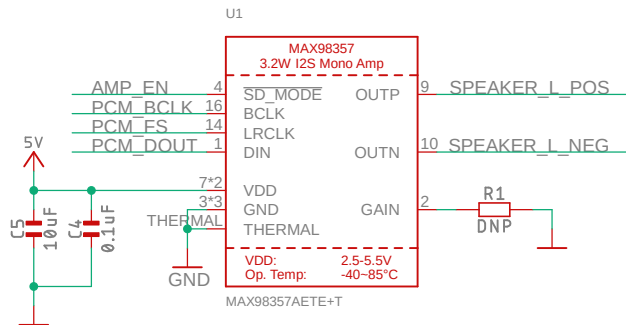


Combined USB boot & user switch



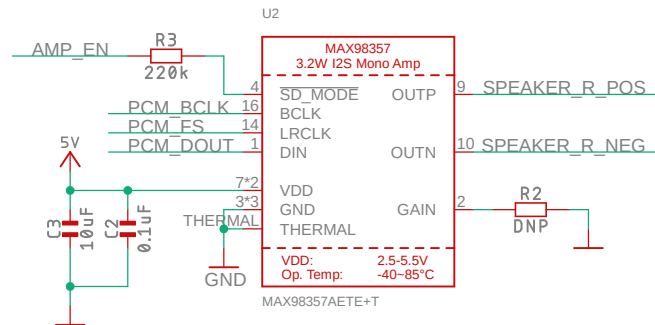
Picade Max USB Audio (PIM742)

DAC & Amplifier (left channel)



R1 = 100k -> Gain 15dB
 R1 = 0ohm -> Gain 12dB
 R1 DNP -> Gain 9dB
 (Gain values of 6dB and 3dB would need a resistor to 5V)

DAC & Amplifier (right channel)



R2 = 100k -> Gain 15dB
 R2 = 0ohm -> Gain 12dB
 R2 DNP -> Gain 9dB
 (Gain values of 6dB and 3dB would need a resistor to 5V)

(resistances at 5V / 3V3 input)
 R3 = 1M/620k -> mix both channels
 R3 = 0ohm -> left channel
 R3 = 370k/220k -> right channel

For right channel SD_MODE voltage needs to be between 0.825V and 1.245V. And the internal pull-down is 92-108k ohm

Speaker output

