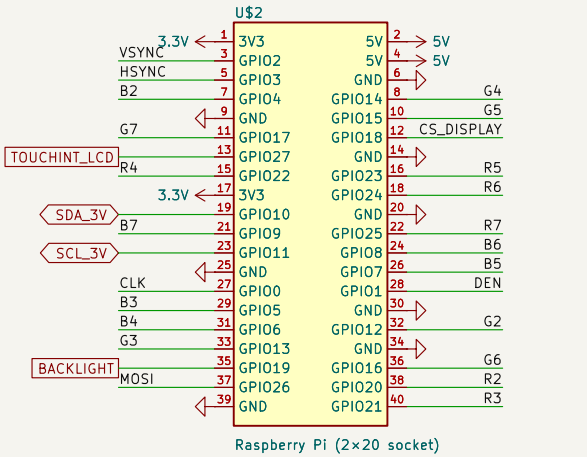
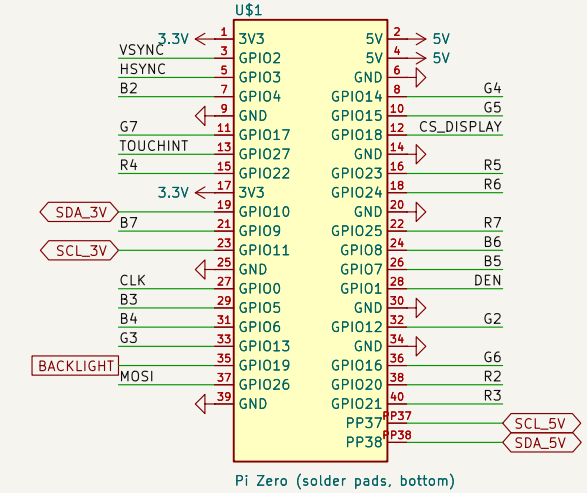
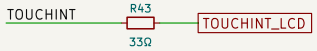
Raspberry Pi



Raspberry Pi (2×20 socket)

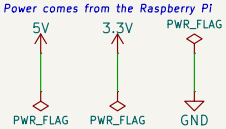


Pi Zero (solder pads, bottom)

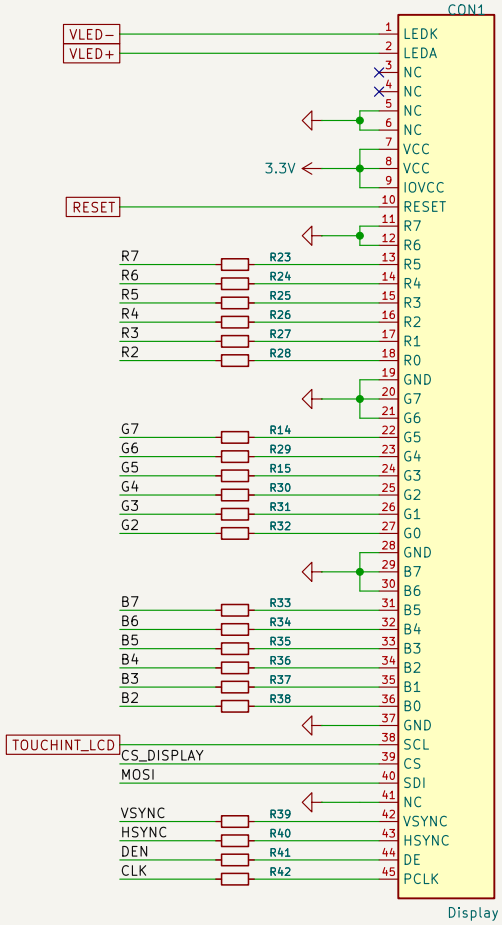


U$1: solder pads for a Pi Zero, parallel to U$2.
Pin 13 connects to TOUCHINT_LCD through R43.

Power comes from the Raspberry Pi



Video signals to the display



Display FH12−45S−0.5SH



Backlight, touch, I²C

Datei: beleuchtung_touch.kicad_sch

Series resistors R14, R15, R23-R43: 33 Ω each, 0402
CON1: pin names from panel TXW397017S4-AS.
The 6 bits per colour go to panel R5-R0,
G5-G0 and B5-B0; bits 7 and 6 are tied to GND.
GPIO 18/26/27 configure the display over SPI at boot,
afterwards GPIO 27 is the touch interrupt.

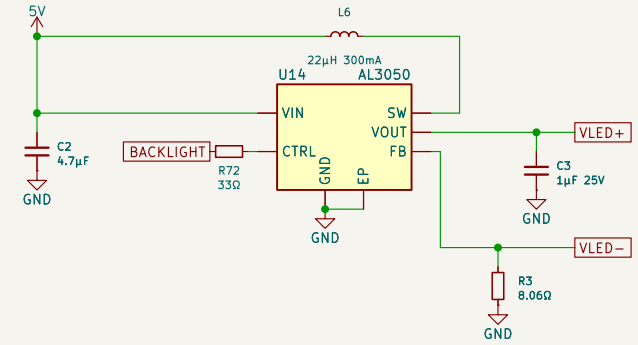
Values as assembled (production BOM 2021)
Redrawn from Eagle hyperpixel−plus.sch (21 Aug 2021) and the board
SHPI GmbH

Sheet: /
File: hyperpixel−plus.kicad_sch

Title: HyperTouch 4.0 - Raspberry Pi and display

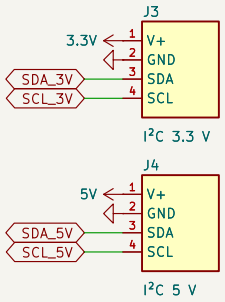
Size: A4	Date: 2026−11−17	**Rev: 4.0**
KiCad E.D.A. 10.0.6		Id: 1/2

Backlight



VLED+/VLED−: display LED string (CON1−2/−1).
R3 sets the LED current, GPIO 19 dims via CTRL.

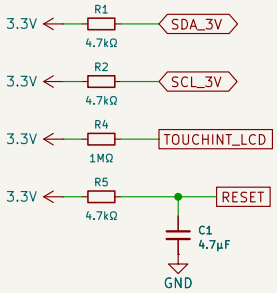
I²C pads (2.54 mm pitch)

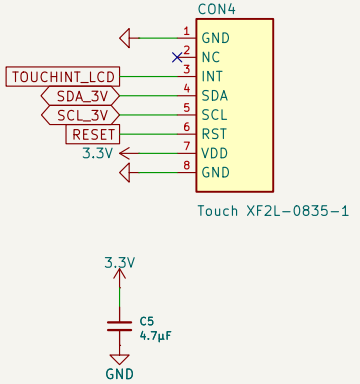


Pads (vias) only, no component.
I²C 5 V only with a soldered−on Pi Zero (PP37/PP38).

Touch

Pull−ups and reset (RC network R5/C1)





Values as assembled (production BOM 2021)
Redrawn from Eagle hyperpixel−plus.sch (21 Aug 2021) and the board
SHPI GmbH

Sheet: /Backlight, touch, I²C/
File: beleuchtung_touch.kicad_sch

Title: HyperTouch 4.0 - Backlight, touch, I²C

Size: A4	Date: 2026−11−17	**Rev: 4.0**
KiCad E.D.A. 10.0.6		Id: 2/2