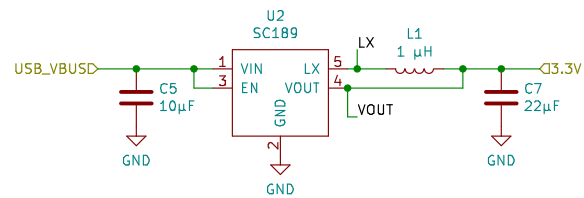


<https://www.github.com/io7m/wederian>
Mark Raynsford

Sheet: /
File: wederian.kicad_sch

Title: Wederian

Size: A4	Date: 2021-10-24	Rev: 0.2.0
KiCad E.D.A.	kicad 5.99.0-unknown-2a6c73b8df~142~ubuntu21.04.1	Id: 1/7

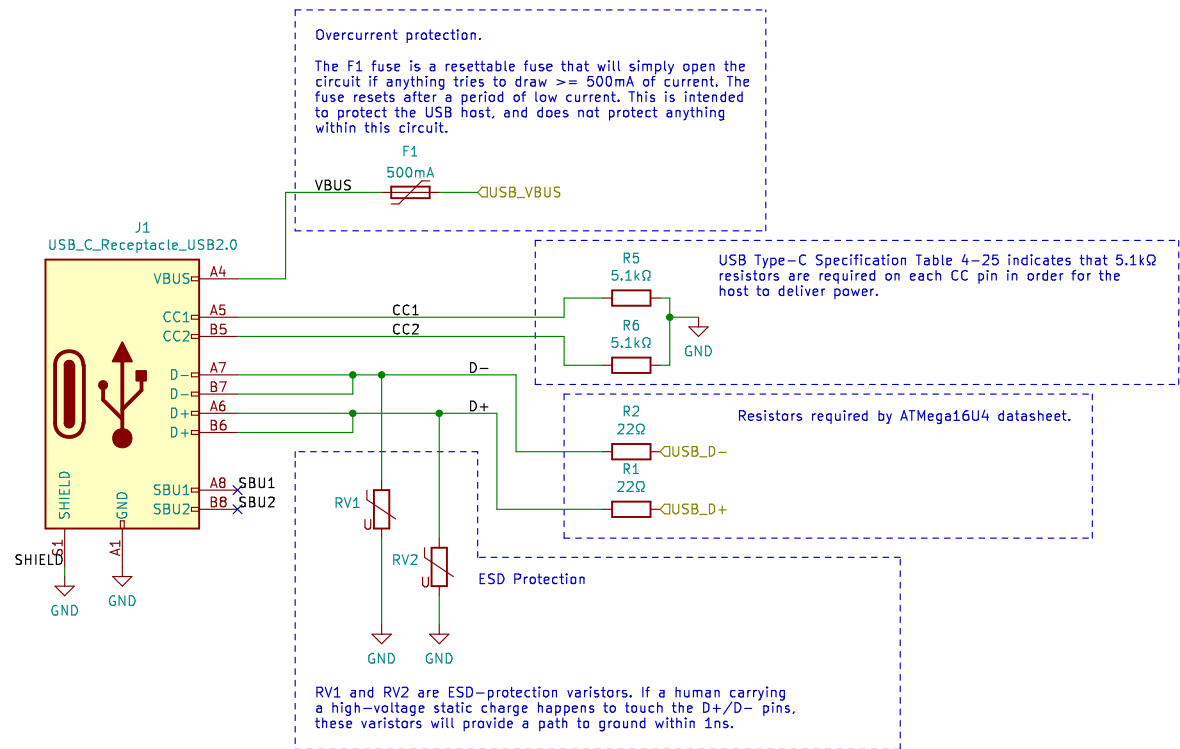


<https://www.github.com/io7m/wederian>
Mark Raynsford

Sheet: /Power Regulation/
File: powerRegulation.kicad_sch

Title: Wederian

Size: A4	Date: 2021-10-24	Rev: 0.2.0
KiCad E.D.A. kicad 5.99.0-unknown-2a6c73b8df~142~ubuntu21.04.1	Id: 2/7	



<https://www.github.com/io7m/wederian>
Mark Raynsford

Sheet: /USB/
File: usb.kicad_sch

Title: Wederian

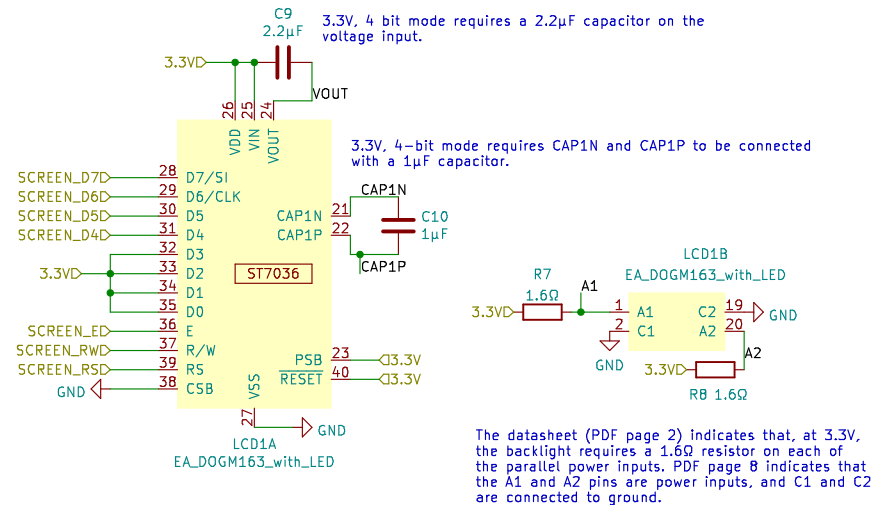
Size: A4 Date: 2021-10-24

KiCad E.D.A. kicad 5.99.0-unknown-2a6c73b8df~142~ubuntu21.04.1

Rev: 0.2.0

Id: 3/7

The LCD display is an EA-D0GM163S-A, with a white EA-LED55X31-W backlight. The display can be configured in multiple ways, and this schematic is using the 3.3V mode with a 4-bit interface. See page 4 of the datasheet.



<https://www.github.com/io7m/wederian>
Mark Raynsford

Sheet: /LCD/
File: lcd.kicad_sch

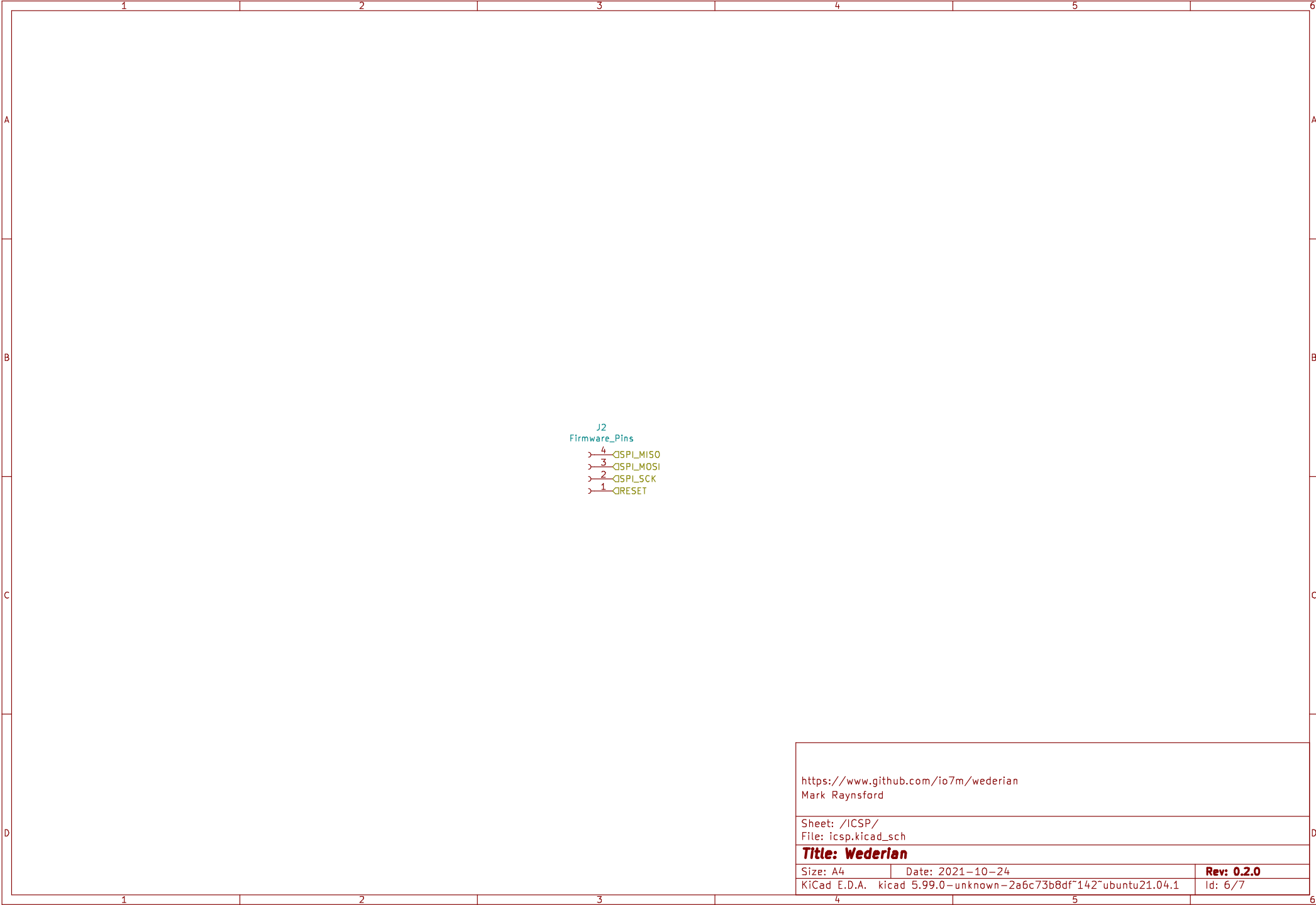
Title: Wederian

Size: A4	Date: 2021-10-24
----------	------------------

Rev: 0.2.0

KiCad E.D.A.	kiCad 5.99.0-unknown-2a6c73b8df~142~ubuntu21.04.1
--------------	---

Id: 5/7



ATMega16U4 datasheet, section 21.5: "A 10µF capacitor is highly recommended on VBUS line".

ATMega16U4 datasheet, section 21.3.2 recommends a 1µF capacitor on the UCAP pin.

Pull-up resistor recommended by AVR042 application notes.

Numerous Atmel application notes recommend a 100nF decoupling capacitor on Vcc pins as standard.

I²C recommends 10kΩ pull-up resistors.

ATmega16U4-AU

<https://www.github.com/io7m/wederian>
Mark Raynsford

Sheet: /Microcontroller/
File: microcontroller.kicad_sch

Title: Wederian

Size: A4	Date: 2021-10-24	Rev: 0.2.0
KiCad E.D.A.	kicad 5.99.0-unknown-2a6c73b8df~142~ubuntu21.04.1	Id: 7/7