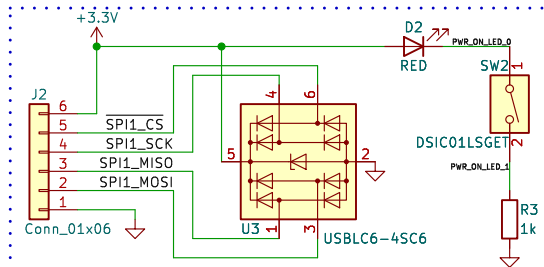
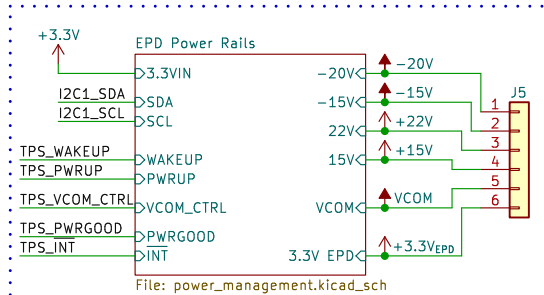


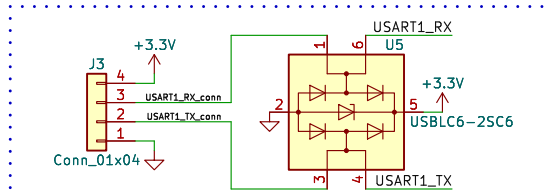
## Main Power & SPI



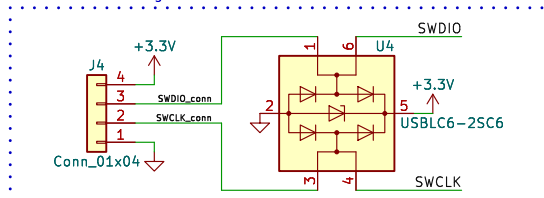
## Power Rails



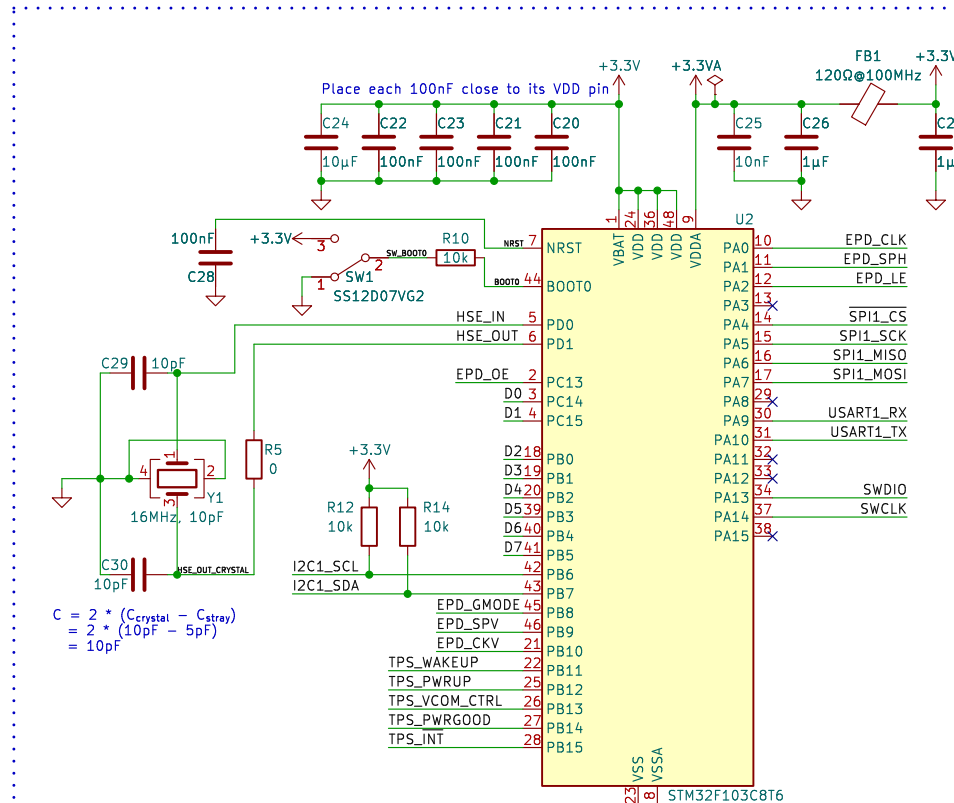
## UART - Programming



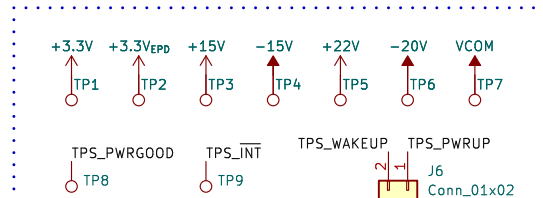
## Serial Wire Debug



## STM32 Microcontroller



## Test Points



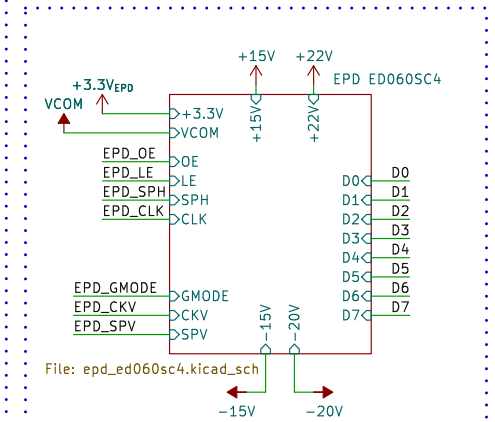
Number of pins required from the  $\mu$ C: 32

- TPS 65185: 7 (4 min)
  - SDA & SCL (I<sup>2</sup>C)
  - WAKEUP & PWRUP
  - PWRGOOD (Can be omitted)
  - VCOM\_CTRL (Can be omitted and connected to 3.3V)
  - INT (Can be omitted and left floating)

- ED060SC4: 15
  - GMODE
  - SPV
  - CKV
  - CL
  - LE
  - OE
  - SPH
  - D0 to D7 (Data Bus)

- STM32F103C8 Reserved: 10
  - SWD (SWCLK, SWDIO)
  - USART (RX, TX)
  - SPI (SCK, MOSI, MISO, CS)
  - Oscillator (OSC\_IN, OSC\_OUT)

## EPD Screen



[https://github.com/Mael-Le-Garrec/ED060SC4\\_driver\\_board](https://github.com/Mael-Le-Garrec/ED060SC4_driver_board)

hatrix

Sheet: /

File: ED060SC4\_SPI\_driver\_board.kicad\_sch

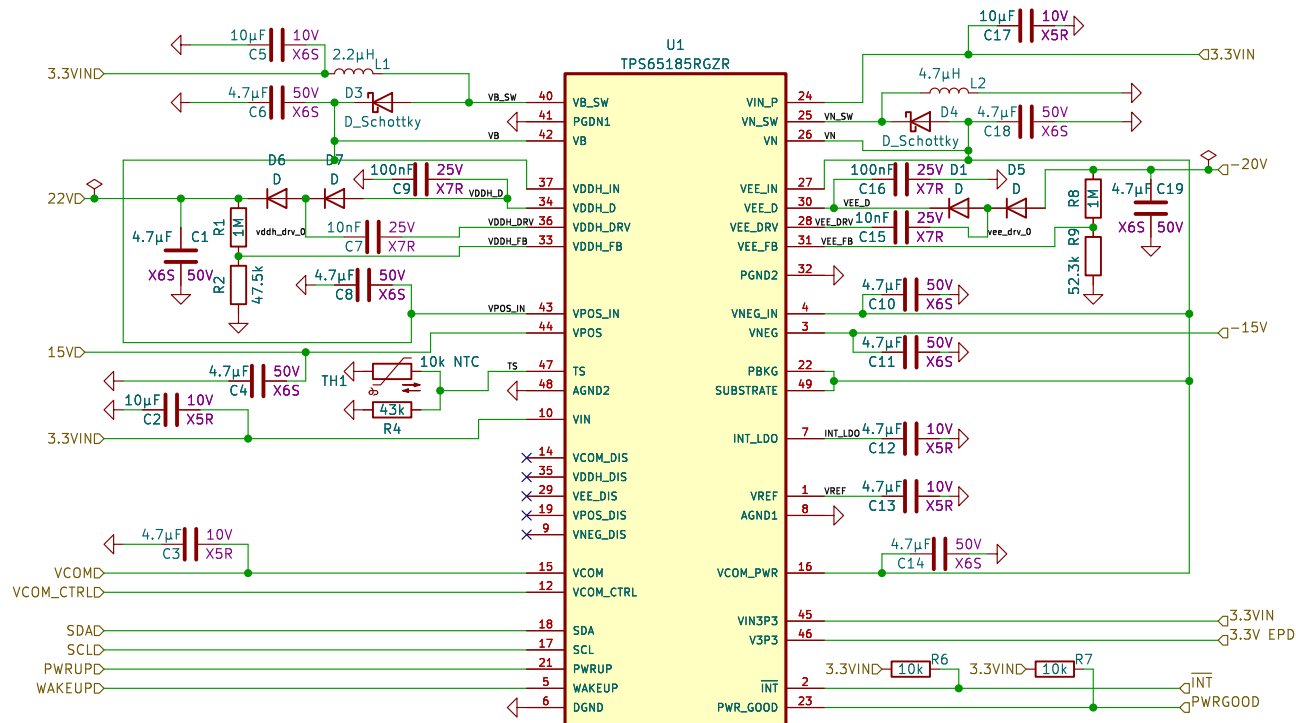
**Title: ED060SC4 SPI Driver Board**

Size: A4 Date: 2023-04-12

KiCad E.D.A. kicad 7.0.1

Rev: 0.1

Id: 1/3



This schematic is based on one found in TI's "TPS65185 Evaluation Module" user's guide. It is suited for the required rails -20V, -15V, 15V, 22V and 3.3V.

This schematic assumes a VIN power of 3.3V, that is also used for the pull-up resistors of  $\overline{\text{INT}}$  and PWR\_GOOD.

Sheet: /EPD Power Rails/  
File: power\_management.kicad\_sch

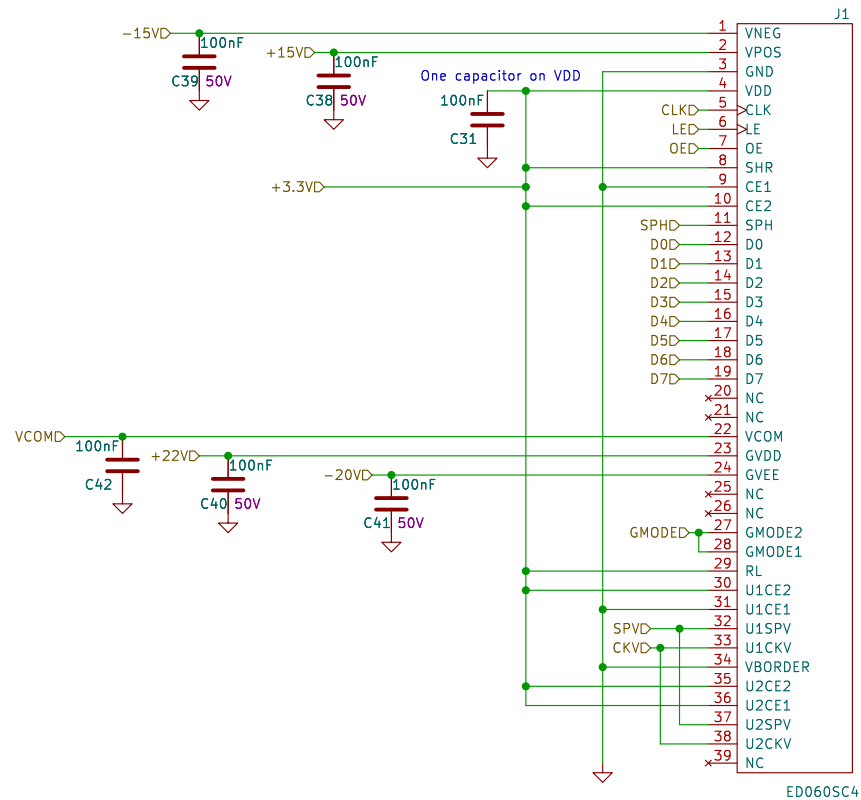
# **Title:**

Size: A4  
KiCad E.D.A. kicad 7.0.1

Date:

Rev: 0.1

Id: 2/3



Sheet: /EPD ED060SC4/  
File: epd\_ed060sc4.kicad\_sch

**Title:**

Size: A4

Date:

KiCad E.D.A. kicad 7.0.1

**Rev:**

Id: 3/3