J1
Raspberry_Pi_4

GPIO12/PWM0
GPIO13/PWM1
GPIO14/UART_TXD
GPIO15/UART_RXD
GPIO16/SPI1_CE2
GPIO17/SPI1_CE1
GPIO18/SPI1_CE0/PCM_CLK/PWM0
GPIO19/SPI1_MISO/PCM_FS
GPIO20/SPI1_MOSI/PCM_DIN/PWM1
GPIO21/SPI1_SCLK/PCM_DOUT
GPIO22/SDIO_CLK
GPIO23/SDIO_CMD
GPIO24/SDIO_DAT0
GPIO25/SDIO_DAT1
GPIO26/SDIO_DAT2
GPIO27/SDIO_DAT3

5V
3V3
ID_SD_I2C0/GPIO00
ID_SC_I2C0/GPIO01
SDA_I2C1/GPIO02
SCL_I2C1/GPIO03
GPCLK0/GPIO04
GPCLK1/GPIO05
GPCLK2/GPIO06
CE1_SPI0/GPIO07
CE0_SPI0/GPIO08
MISO_SPI0/GPIO09
MOSI_SPI0/GPIO10
SCLK_SPI0/GPIO11

+5V
VDD
GND

DPI Connector
J2

Backlight Driver

L1
22 uH

D1
BAT54

+5V

C1
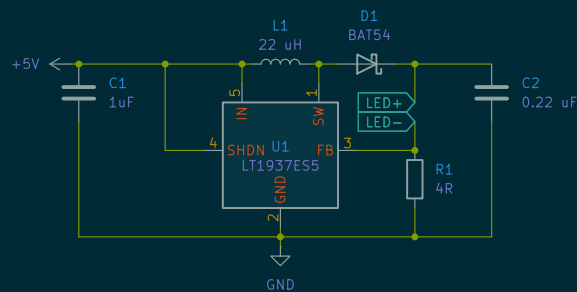1uF

IN   SW
SHDN U1
LT1937ES5
GND   FB

LED+
LED−

R1
4R

C2
0.22 uF

GND

— Jumpers JP1 and JP2 allow you to choose what to use — either I2C or HSYNC/VSYNC
— Capacity of output capacitor (C2) can be increased if you don't have an 0.22 uF one
— R1 resistor determines backlight current: (4 Ohm is equal ~20 mA)
Refer to the LT1937 Datasheet to decrease current (Table 4. R1 Resistor Value Selection)

Sheet: /
File: DPI4RPi.kicad_sch
Title: DPI4RPi Adapter
Size: A4   Date: 07−10−2025   **Rev: 1.1**
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