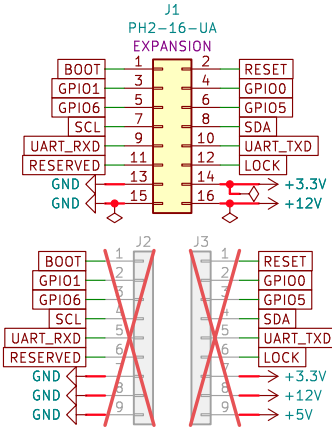


EXPANSION PORT

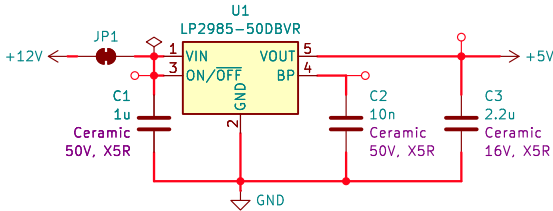
Header for accessories and factory programming

- GPIO0, GPIO1, GPIO5, GPIO6 can be used for any purpose
- UART_RXD and UART_TXD provide the serial port
- SCL and SDA provide the I2C bus (QWIIC)
- RESET and BOOT are wired in parallel with their corresponding buttons (active low)
- LOCK engages the safety lock (active low)
- 12 V supply is unregulated, 1 A current available
- 3.3 V supply is regulated, 600 mA current available



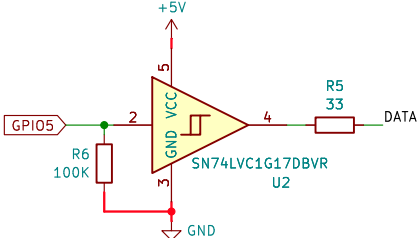
5 V POWER SUPPLY

Supplies 150 mA, ultra low quiescent current (microamps)



5 V LEVEL SHIFTER FOR DATA

The driver can supply up to 32 mA at 5 V
33 ohm resistor reduces signal reflections and protects the output

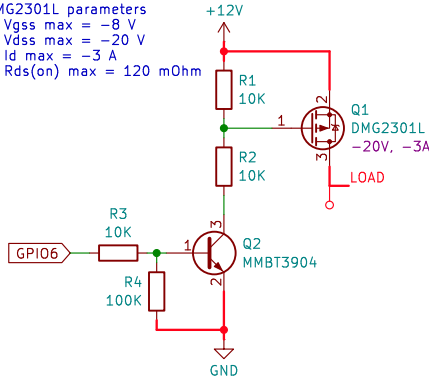


HIGH-SIDE SWITCH FOR 1 A LOAD AT 12 V

Suitable for PWM switching at low frequencies (< 1 KHz)

DMG2301L parameters

- Vgss max = -8 V
- Vdss max = -20 V
- Id max = -3 A
- Rds(on) max = 120 mOhm



OUTPUT CONNECTOR FOR LOAD AND DATA

Suitable for PWM dimmable LED light or addressable LED strip



github.com/j9brown/minuet

Brown Studios LLC

Sheet: /

File: light.kicad_sch

Title: Minuet Light Accessory

Size: A4

Date: 2025-06

Rev: v3.0

KiCad E.D.A. 8.0.8

Id: 1/1