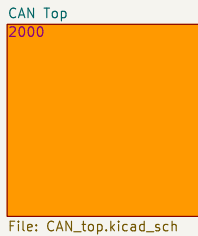


BE-IIS-HAT++CAN-FD-SIC-Rev.B

Brechel Electronic

Industrie Interface Solutions

www.be-iis-eu



Brechel Electronic
Industrial Interface Solutions
Designed by Philipp Brechel (Germany)

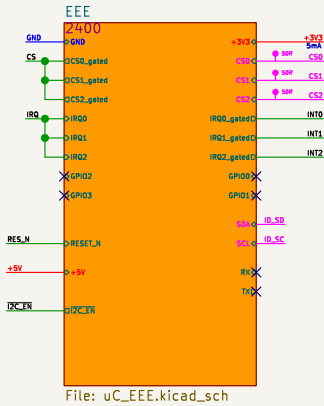
Sheet: /
File: BRECHEL_HAT_CAN.kicad_sch

Title: Pi-HAT+: CAN-FD-SIC

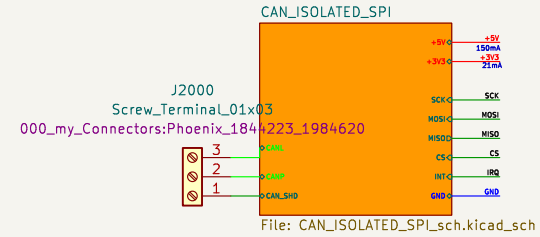
Size: A4 Date: 2026-03-25
KiCad E.D.A. 9.0.7

Rev: B
Id: 1/8

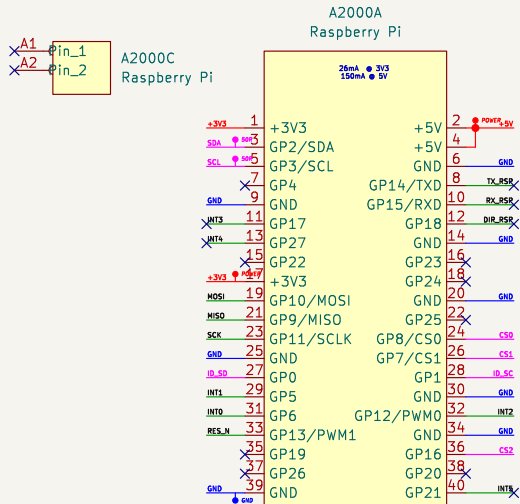
HAT+ EEprom



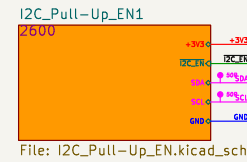
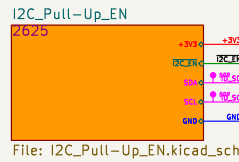
CAN-FD-SIC



Pi Pinout



I2C Pullups



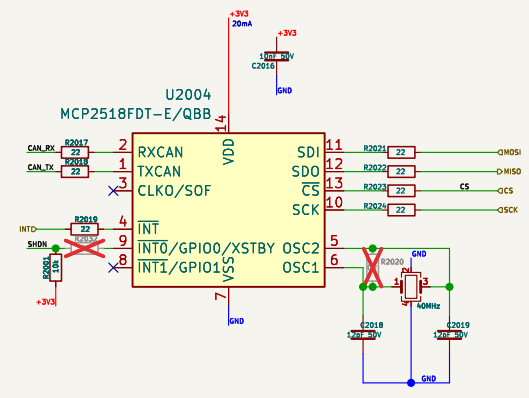
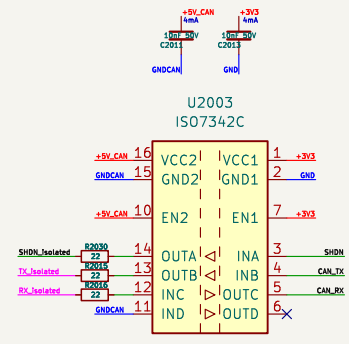
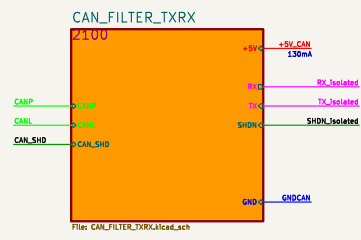
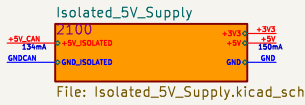
Brechel Electronic
Industrial Interface Solutions
Designed by Philipp Brechel (Germany)

Sheet: /CAN Top/
 File: CAN_top.kicad_sch

Title: Pi-HAT+: CAN-FD-SIC

Size: A4 | Date: 2026-03-25
 KiCad E.D.A. 9.0.7

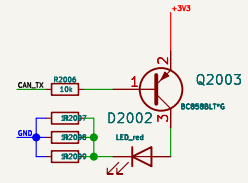
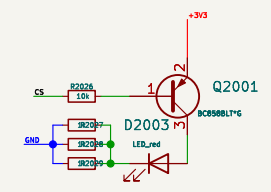
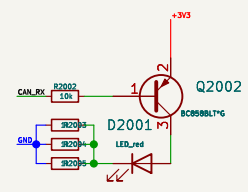
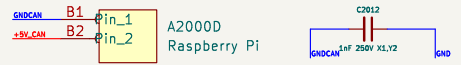
Rev: B
 Id: 12/8



$$C70 = C69 = 2 * (C_{load} - C_{stray}) = 12\text{pF}$$

$$C_{load} = 15\text{pF}$$

$$C_{stray} = 9\text{pF}$$



Brechel Electronic
Industrial Interface Solutions
Designed by Philipp Brechel (Germany)

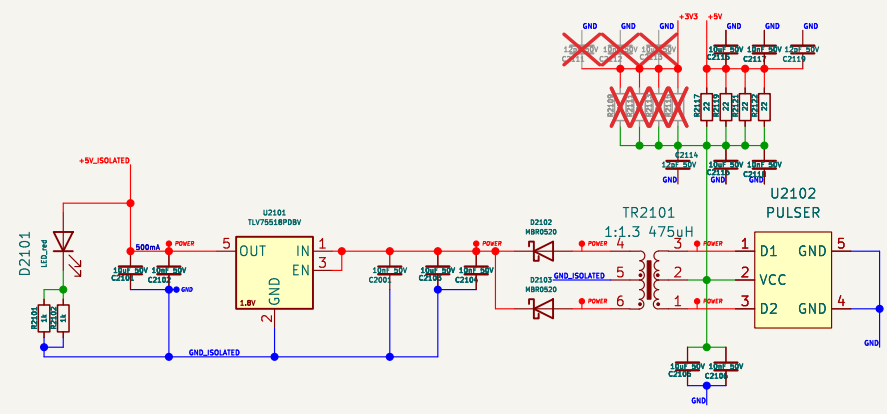
Sheet: /CAN Top/CAN_ISOLATED_SPI/
File: CAN_ISOLATED_SPI_sch.kicad_sch

Title: Pi-HAT+: CAN-FD-SIC

Size: A4	Date: 2026-03-25	Rev: B
KiCad E.D.A. 9.0.7		Id: 2/8

+5V_ISOLATED -> +5V_ISOLATED
 GND_ISOLATED -> GND_ISOLATED

GND -> GND
 -3V3 -> +3V3
 -5V -> +5V

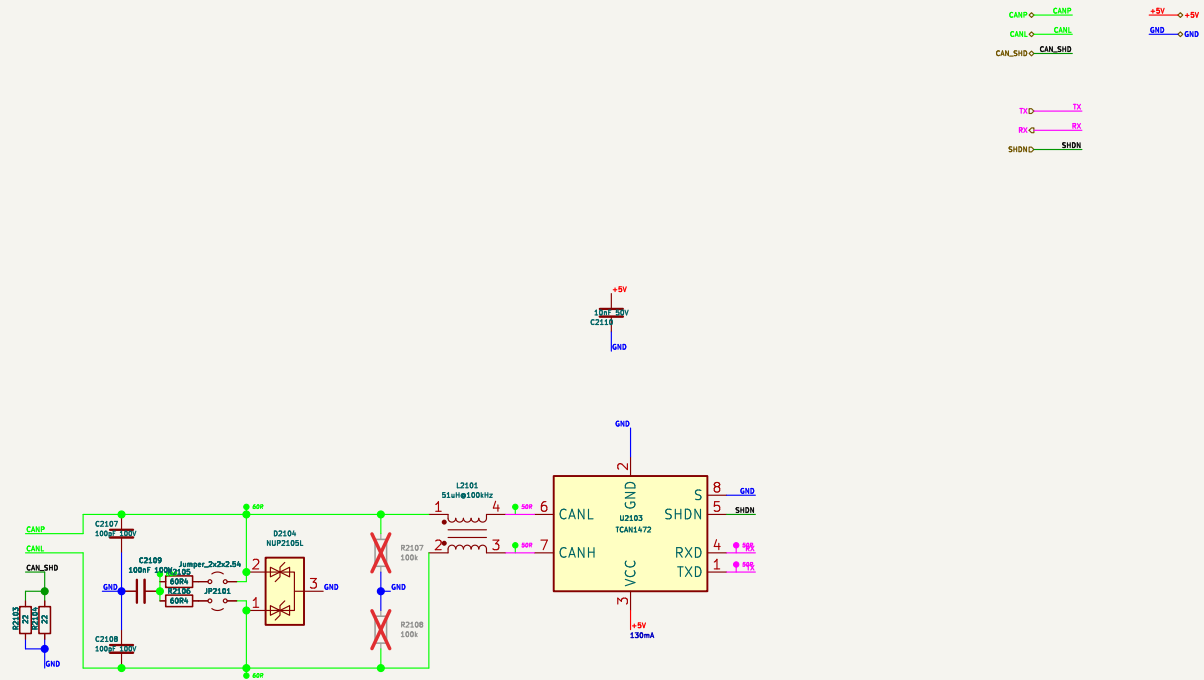


Brechel Electronic
 Industrial Interface Solutions
 Designed by Philipp Brechel (Germany)

Sheet: /CAN Top/CAN_ISOLATED_SPI/Isolated_5V_Supply/
 File: Isolated_5V_Supply.kicad_sch

Title: Pi-HAT+: isolated 5V supply

Size: A4	Date: 2026-03-25	Rev: B
KiCad E.D.A. 9.0.7		Id: 27/8



Brechel Electronic
Industrial Interface Solutions
Designed by Philipp Brechel (Germany)

Sheet: /CAN Top/CAN_ISOLATED_SPI/CAN_FILTER_TXRX/
 File: CAN_FILTER_TXRX.kicad_sch

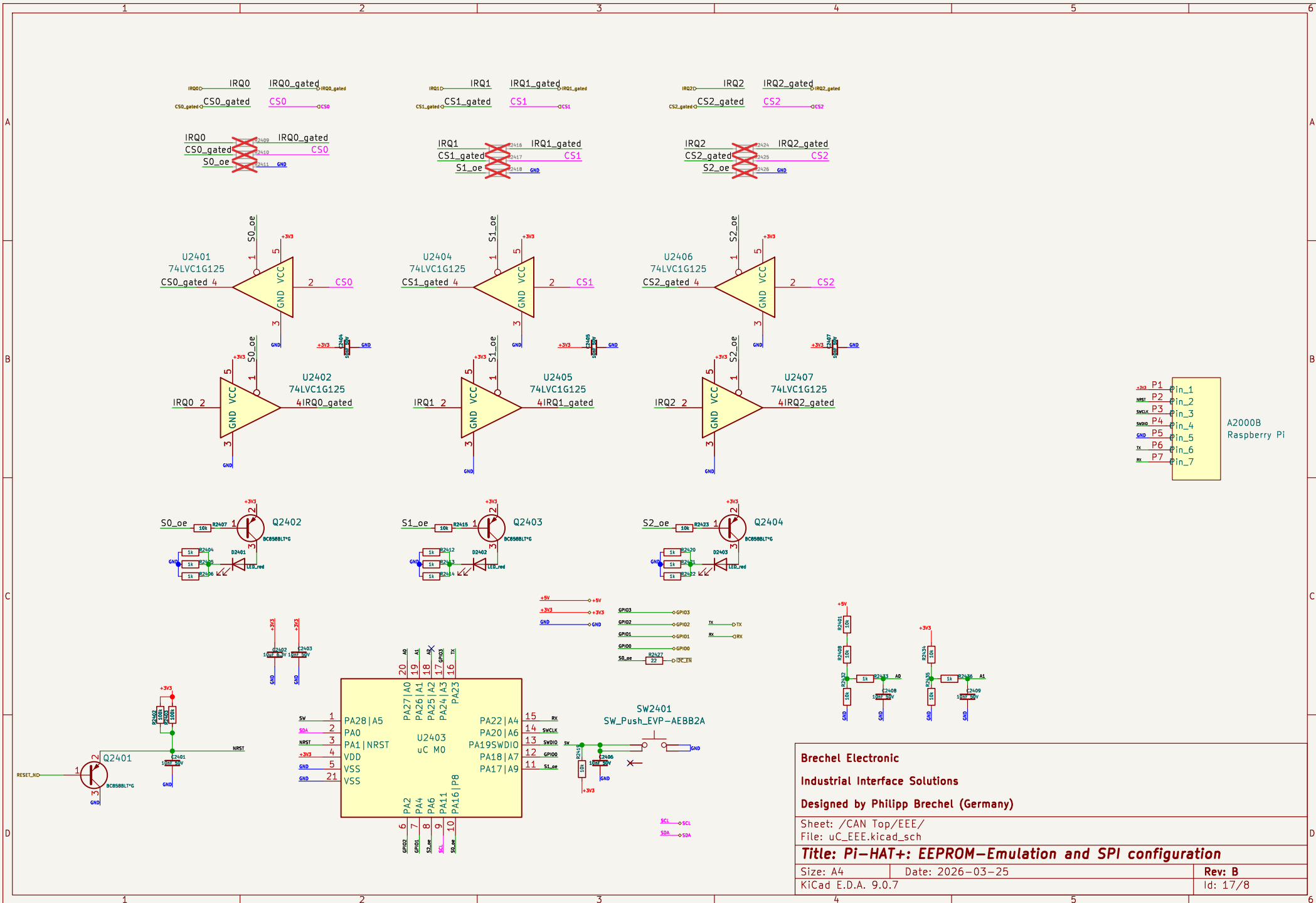
Title: Pi-HAT+: CAN - PHY

Size: A4 Date: 2026-03-25

KiCad E.D.A. 9.0.7

Rev: B

Id: 28/8

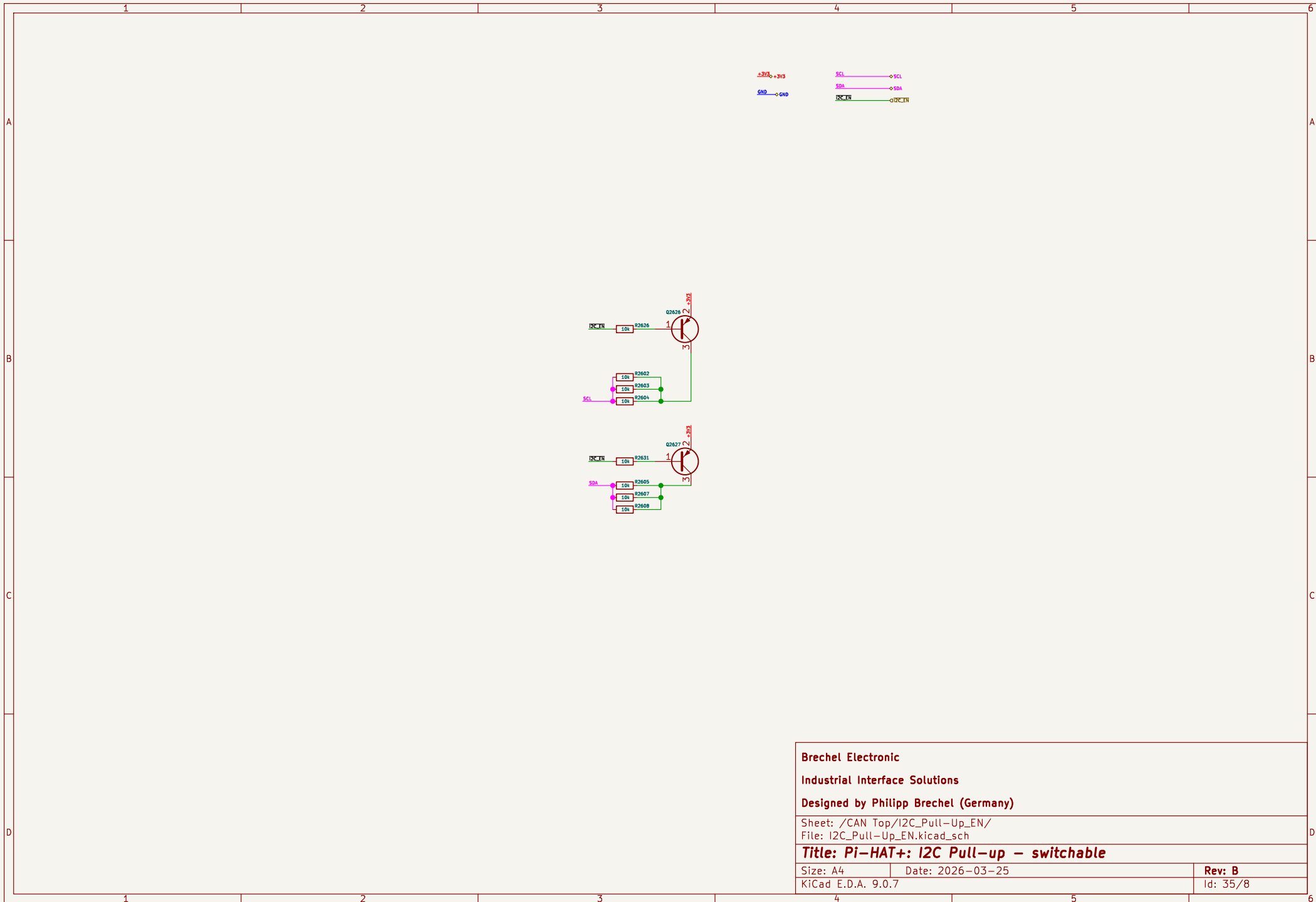


Brechel Electronic
 Industrial Interface Solutions
 Designed by Philipp Brechel (Germany)

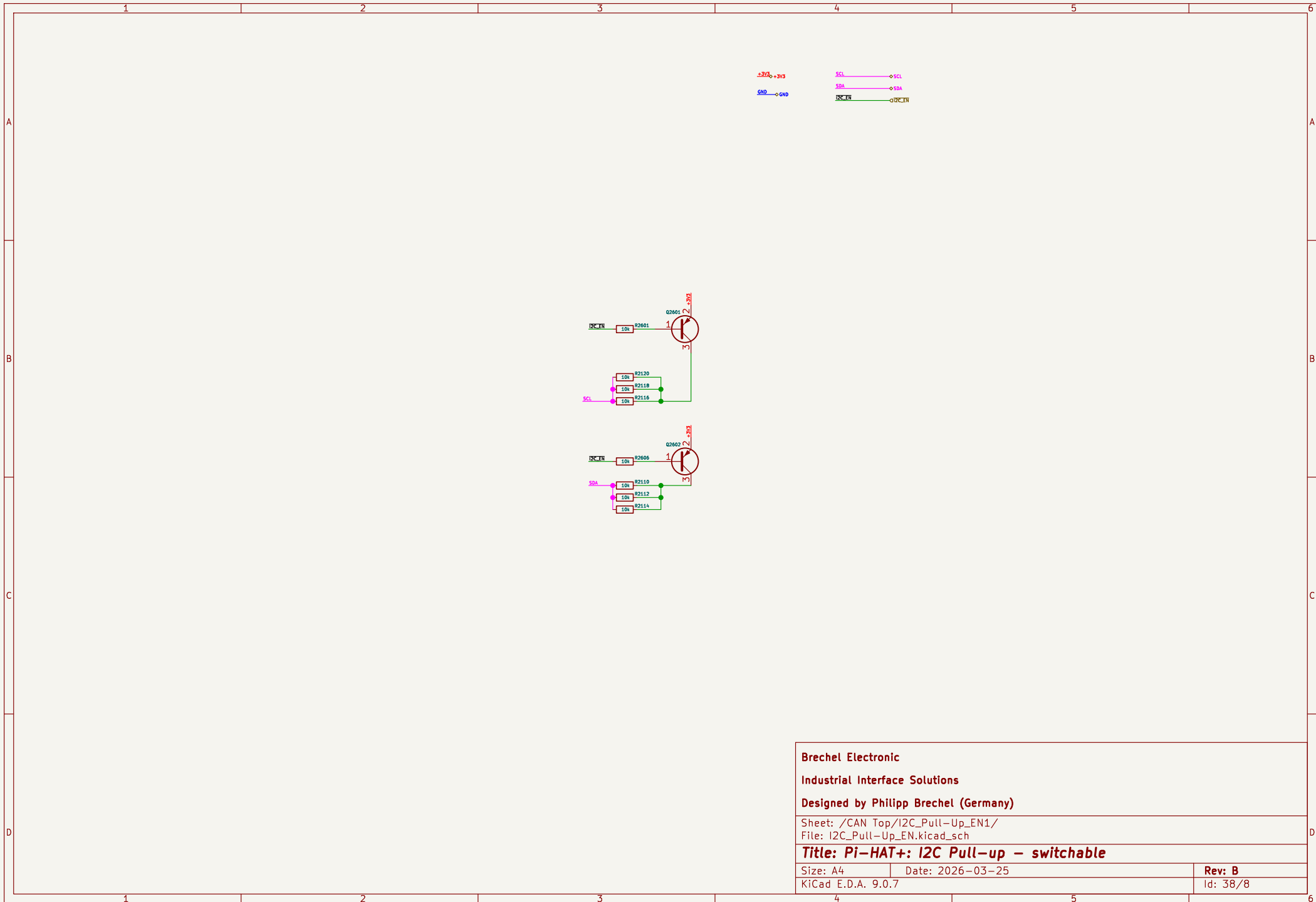
Sheet: /CAN Top/EEE/
 File: uC_EEE.kicad_sch

Title: Pi-HAT+: EEPROM-Emulation and SPI configuration

Size: A4	Date: 2026-03-25
KiCad E.D.A. 9.0.7	Rev: B Id: 17/8



Brechel Electronic		
Industrial Interface Solutions		
Designed by Philipp Brechel (Germany)		
Sheet: /CAN Top/I2C_Pull-Up_EN/ File: I2C_Pull-Up_EN.kicad_sch		
Title: Pi-HAT+: I2C Pull-up – switchable		
Size: A4	Date: 2026-03-25	Rev: B
KiCad E.D.A. 9.0.7		Id: 35/8



Brechel Electronic
Industrial Interface Solutions
Designed by Philipp Brechel (Germany)

Sheet: /CAN Top/I2C_Pull-Up_EN1/
 File: I2C_Pull-Up_EN.kicad_sch

Title: Pi-HAT+: I2C Pull-up – switchable

Size: A4	Date: 2026-03-25	Rev: B
KiCad E.D.A. 9.0.7		Id: 38/8