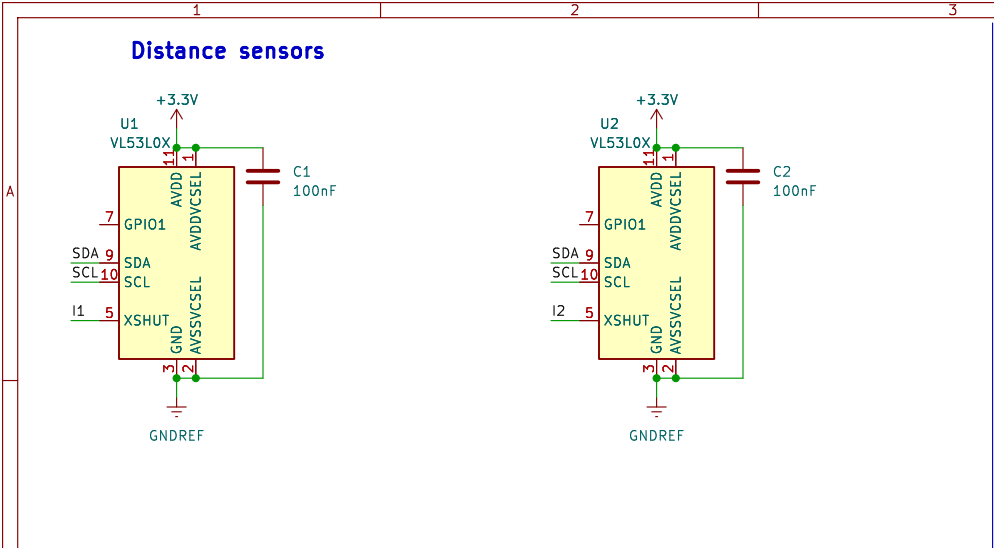


Distance sensors

The diagrams show two identical circuit setups for VL53L0X distance sensors. Each sensor (U1 and U2) is connected to a +3.3V supply and ground (GNDREF) with a 100nF capacitor (C1 and C2 respectively). The sensors have pins for AVDD, AVSSVCSEL, GPIOD, SDA, SCL, and XSHUT. The left sensor is also connected to a 1.1V reference pin.



Connectors

+3.3V

1
SDA 2
SCL 3
I1 4
5

J1
Conn_01x05

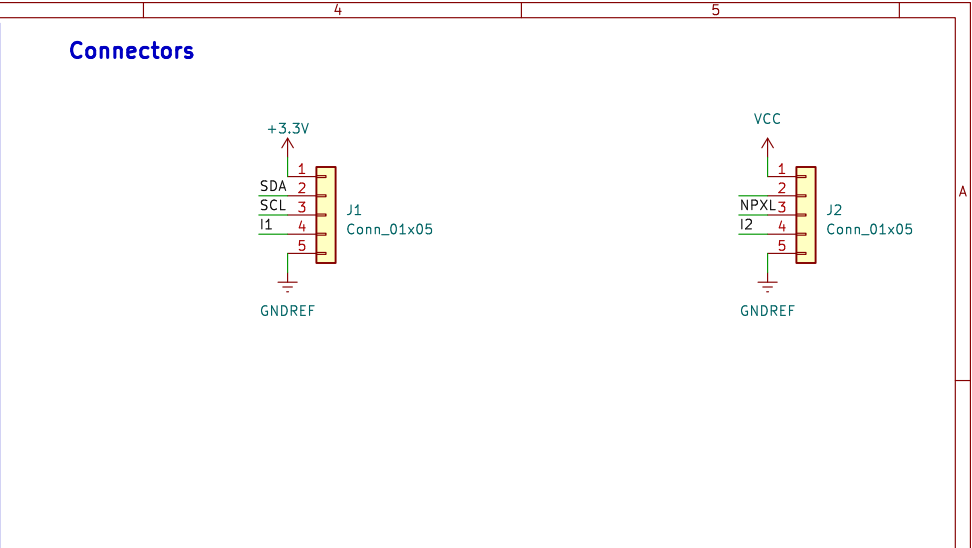
GNDREF

VCC

1
NPXL 2
I2 3
4
5

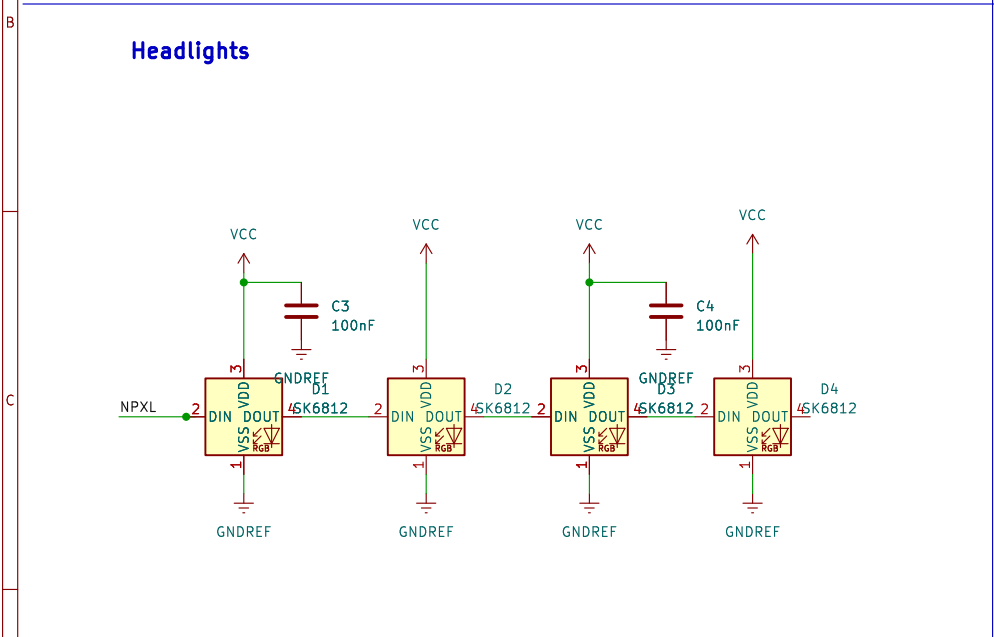
J2
Conn_01x05

GNDREF



Headlights

The diagram shows four cascaded 1-bit D flip-flops (D1, D2, D3, D4) configured as a 4-bit shift register. The input NPXL is connected to the DIN of D1. The output of D1 (DOUT) is connected to the DIN of D2, and so on. Each flip-flop has VDD and VSS pins connected to VCC and GNDREF respectively. A 100nF capacitor (C3) is connected between VDD and GNDREF for D1, and a 100nF capacitor (C4) is connected between VDD and GNDREF for D3. The output of D4 (DOUT) is labeled D4.



Sheet:	
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Title: Distance sensor board	License: MIT License
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