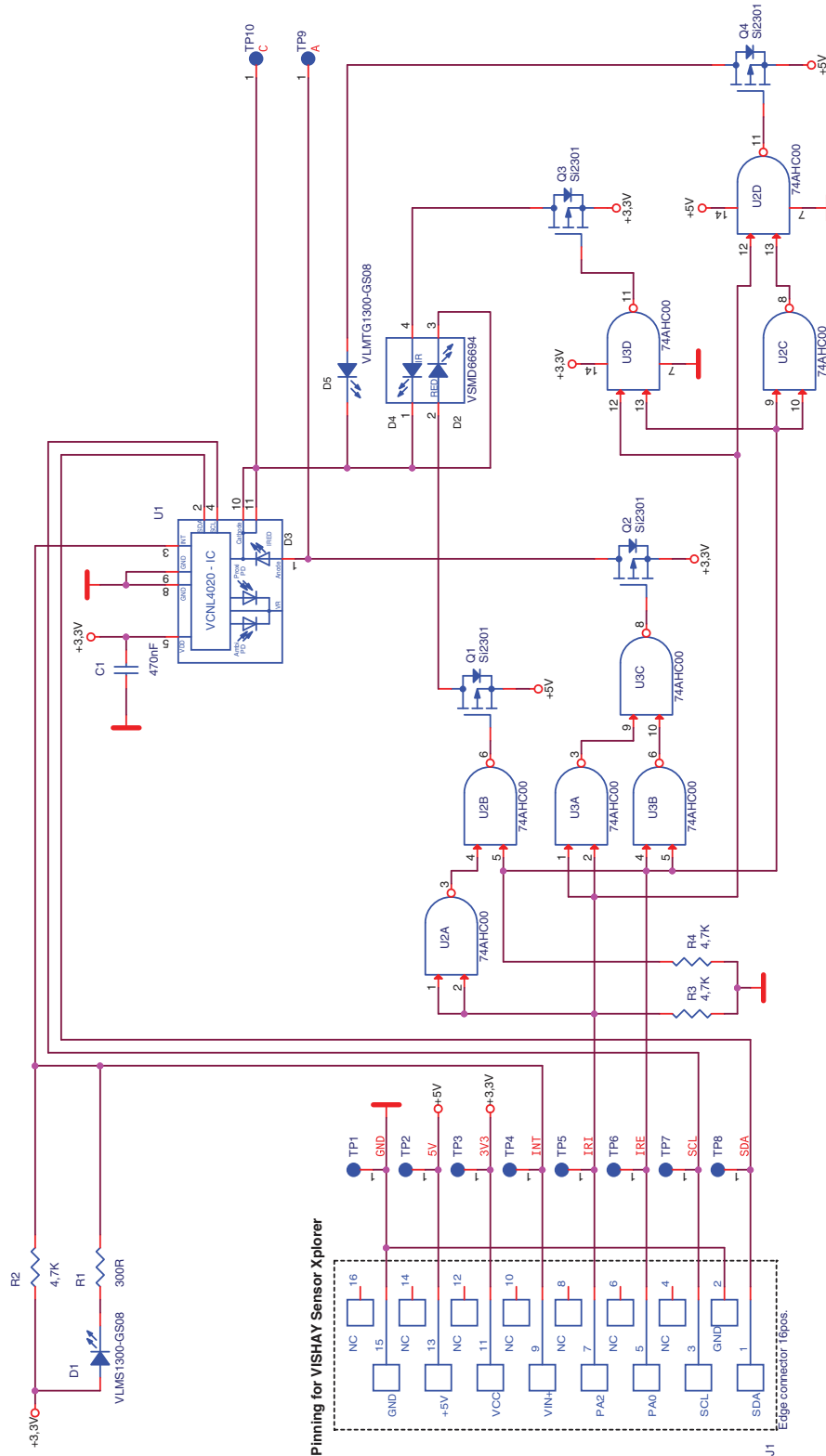


VCNL4020C Sensor Board

SCHEMATIC

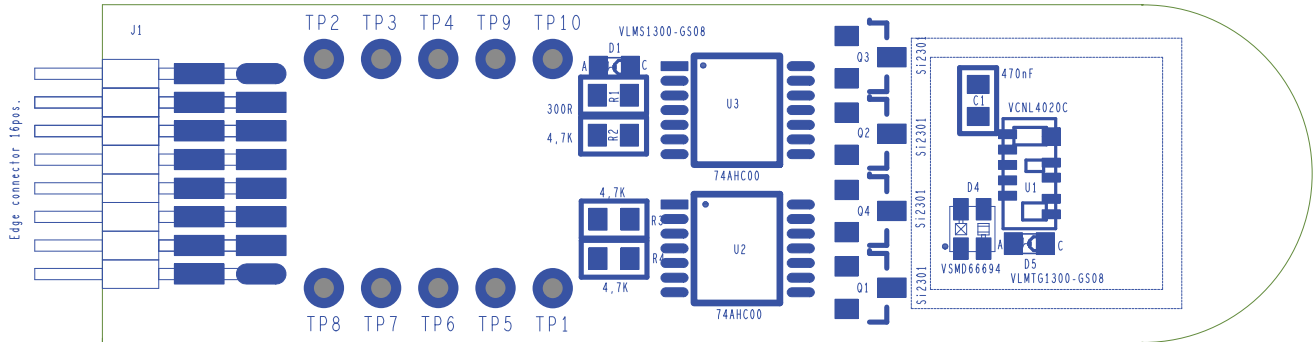


When using the VCNL4020C sensor board without Vishay SensorXplorer™ an additional pullup resistor (2.4 kΩ to 10 kΩ) on SDA and SCL is necessary

IRI	IRE	IRED operating
L or open	L or open	D3 (int. IRED)
L or open	H	D2 (red LED)
H	L or open	D5 (green LED)
H	H	D4 (ext. IRED)

ASSEMBLY

VCNL4020C sensor board, rev. 2.0



Assembly top

BILL OF MATERIALS					
ITEM	QUANTITY	REFERENCE	COMPONENT CLASS	VALUE	PACKAGE
1	1	C1	Capacitor NP	470 nF	SMC0603
2	1	D1	LED red	VLMS1300	SMD0603
3	1	D4	IR LED 850 nm	VSMD66694	SMD
4	1	D5	LED green	VLMTG1300	SMD0603
5	1	R1	Resistor	300 Ω	SMR0603
6	1	R2	Resistor	4.7 kΩ	SMR0603
7	1	R3	Resistor	4.7 kΩ	SMR0603
8	1	R4	Resistor	4.7 kΩ	SMR0603
9	1	Q1	Transistor	Si2301	SMSOT23GSD
10	1	Q2	Transistor	Si2301	SMSOT23GSD
11	1	Q3	Transistor	Si2301	SMSOT23GSD
12	1	Q4	Transistor	Si2301	SMSOT23GSD
13	1	U1	Sensor	VCNL4020C	SMD
14	1	U2	IC	74AHC00	TSSOP14
15	1	U3	IC	74AHC00	TSSOP14
16	1	J1	Edge connector	2 x 8 pos.	SMD header strip