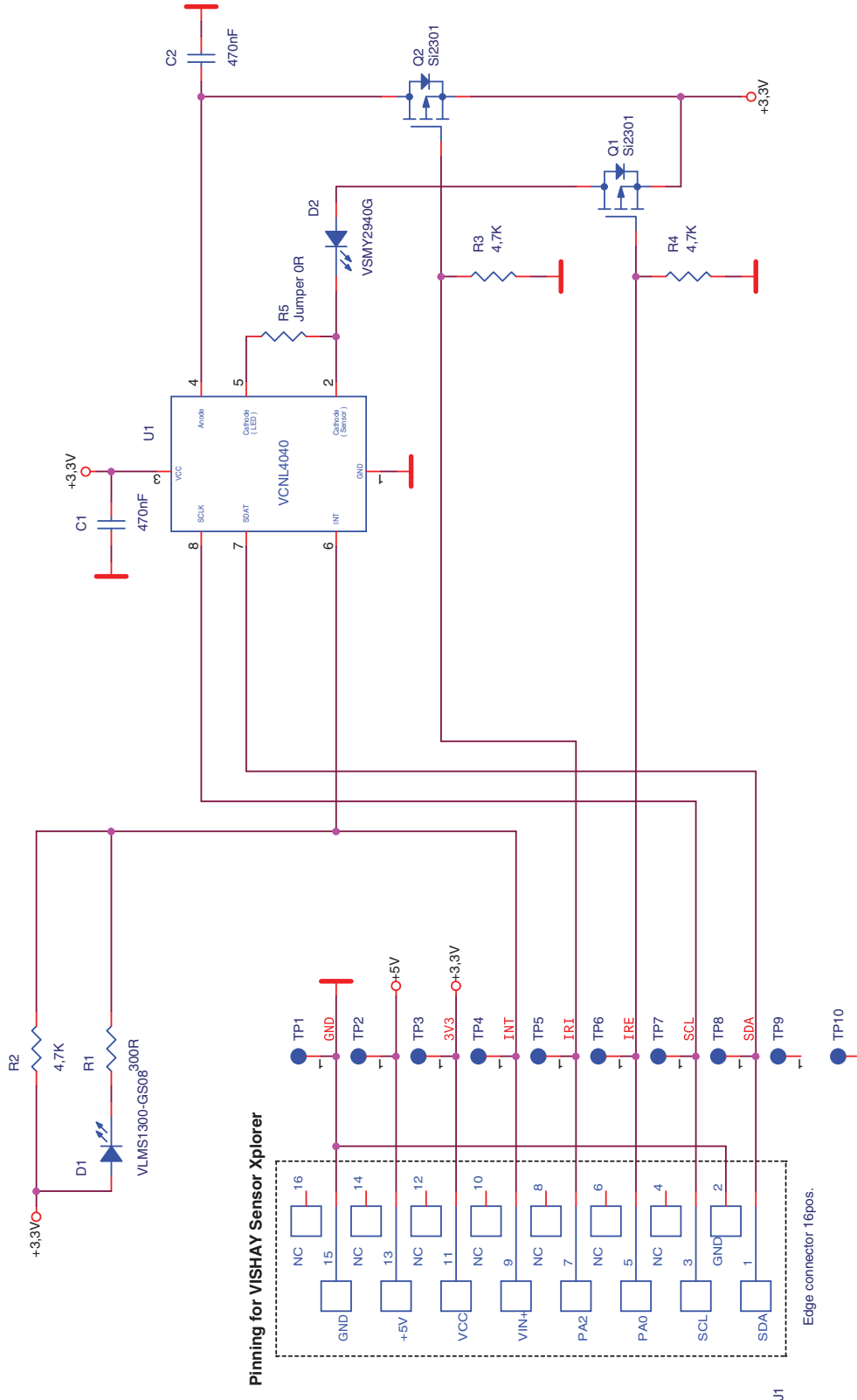


VCNL4040 Sensor Board

SCHEMATIC

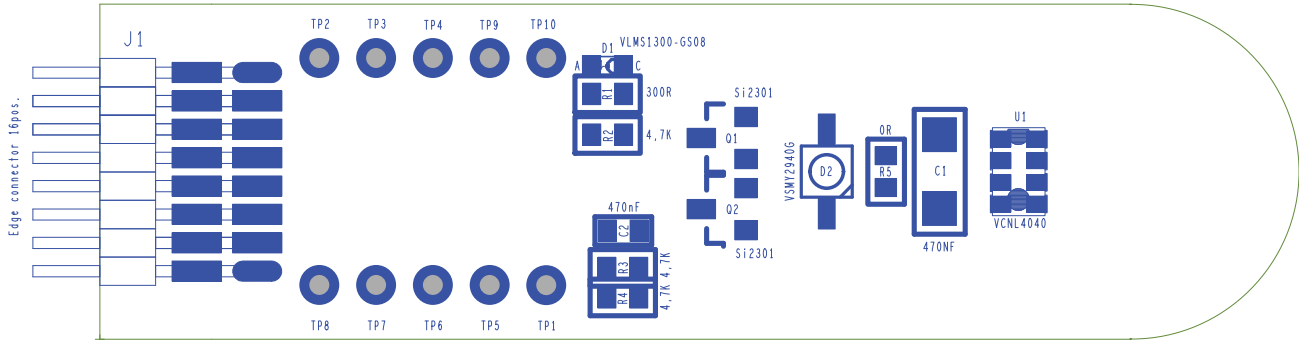


When using the VCNL4040 sensor board without Vishay SensorExplorer™ an additional pullup resistor (2.4 kΩ to 10 kΩ) on SDA and SCL is necessary

IRI	IRE	IRED operating
L or open	L or open	forbidden
L or open	H	internal IRED
H	L or open	external IRED
H	H	no IRED

ASSEMBLY

VCNL4040 sensor board, rev. 2.0



Assembly top

BILL OF MATERIALS					
ITEM	QUANTITY	REFERENCE	COMPONENT CLASS	VALUE	PACKAGE
1	1	C1	Capacitor NP	470 nF	SMC1206
2	1	D1	LED red	VLMS1300	SMD0603
3	1	D2	IR LED 940 nm	VSMY2940G	SMD
4	1	R1	Resistor	300 Ω	SMR0603
5	1	R2	Resistor	4.7 kΩ	SMR0603
6	1	R3	Resistor	4.7 kΩ	SMR0603
7	1	R4	Resistor	4.7 kΩ	SMR0603
8	1	R5	Resistor	0 Ω	SMR0603
9	1	Q1	Transistor	Si2301	SMSOT23GSD
10	1	Q1	Transistor	Si2301	SMSOT23GSD
11	1	U1	Sensor	VCNL4040	SMD
12	1	J1	Edge connector	2 x 8 pos.	SMD header strip