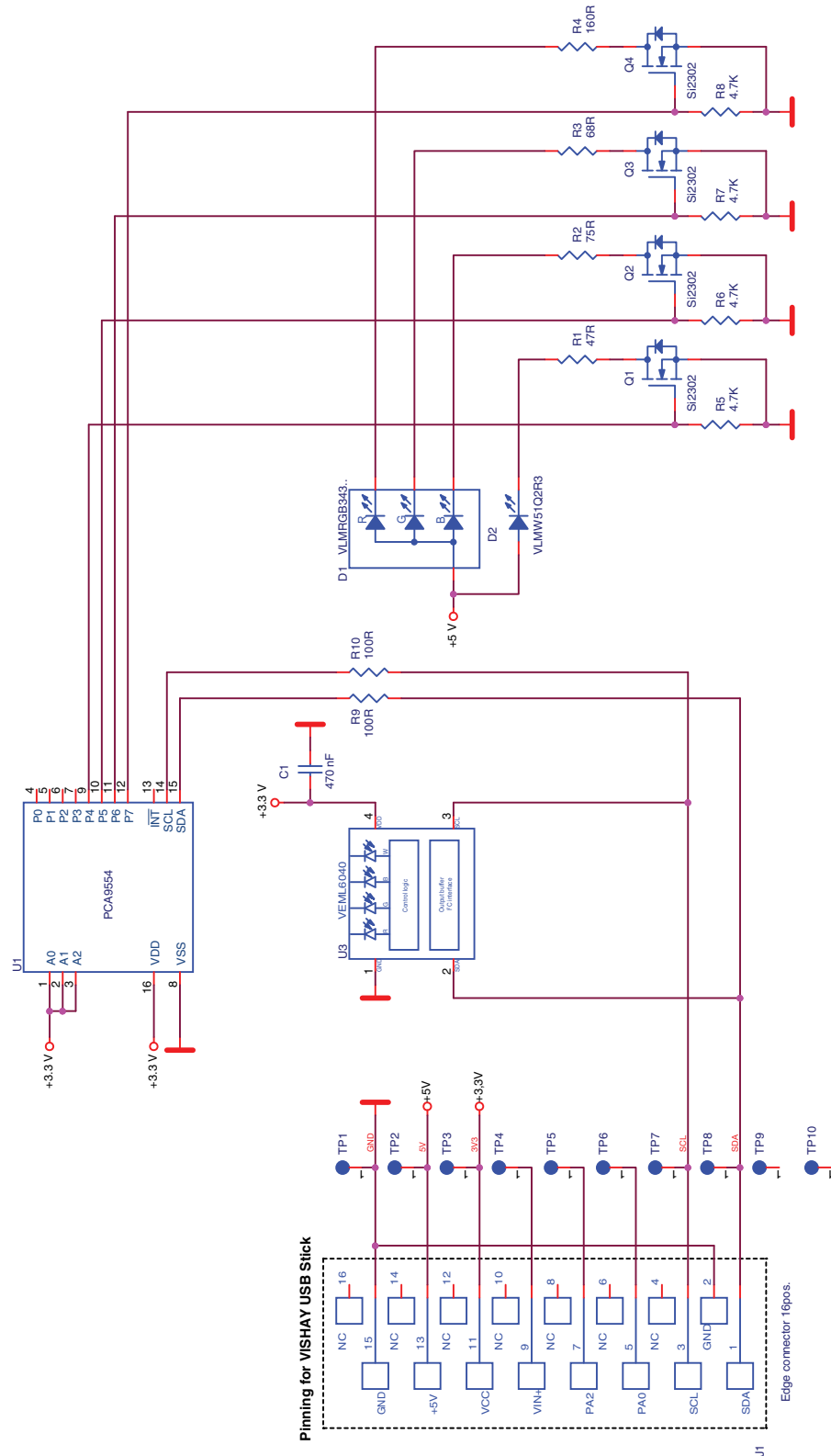


VEML6040 Sensor Board

SCHEMATIC

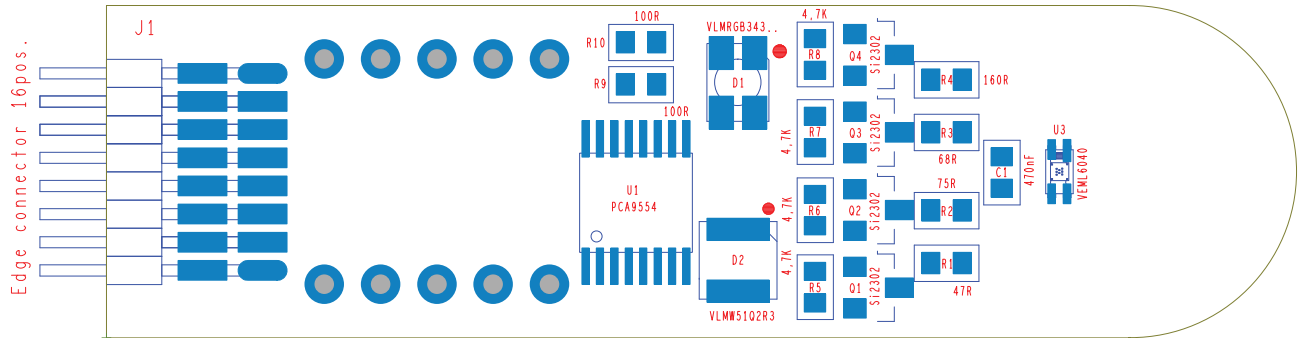


When using the VEML6040 sensor board without Vishay USB stick, an additional pullup resistor (2.4 kΩ to 10 kΩ) on SDA and SCL is necessary



ASSEMBLY

VEML6040 sensor board, rev. 5.0



Assembly top

BILL OF MATERIALS					
ITEM	QUANTITY	REFERENCE	COMPONENT CLASS	VALUE	PACKAGE
1	1	C1	Capacitor	470 nF	SMC0603
2	1	D1	LED	RGB	PLCC-4
3	1	D2	LED	White	PLCC-2 plus
4	1	R1	Resistor	47 Ω	SMR0603
5	1	R2	Resistor	75 Ω	SMR0603
6	1	R3	Resistor	68 Ω	SMR0603
7	1	R4	Resistor	160 Ω	SMR0603
8	1	R5	Resistor	4.7 k Ω	SMR0603
9	1	R6	Resistor	4.7 k Ω	SMR0603
10	1	R7	Resistor	4.7 k Ω	SMR0603
11	1	R8	Resistor	4.7 k Ω	SMR0603
12	1	R9	Resistor	100 Ω	SMR0603
13	1	R10	Resistor	100 Ω	SMR0603
14	1	R11	Resistor	4.7 k Ω	SMR0603
15	1	Q1	Transistor	Si2302	SMSOT23GSD
16	1	Q2	Transistor	Si2302	SMSOT23GSD
17	1	Q3	Transistor	Si2302	SMSOT23GSD
18	1	Q4	Transistor	Si2302	SMSOT23GSD
19	1	U2	IC	PCA9554	TSSOP16
20	1	U3	Sensor	VEML6040	SMD
21	1	J1	Edge connector	2 x 8 pos.	SMD header strip