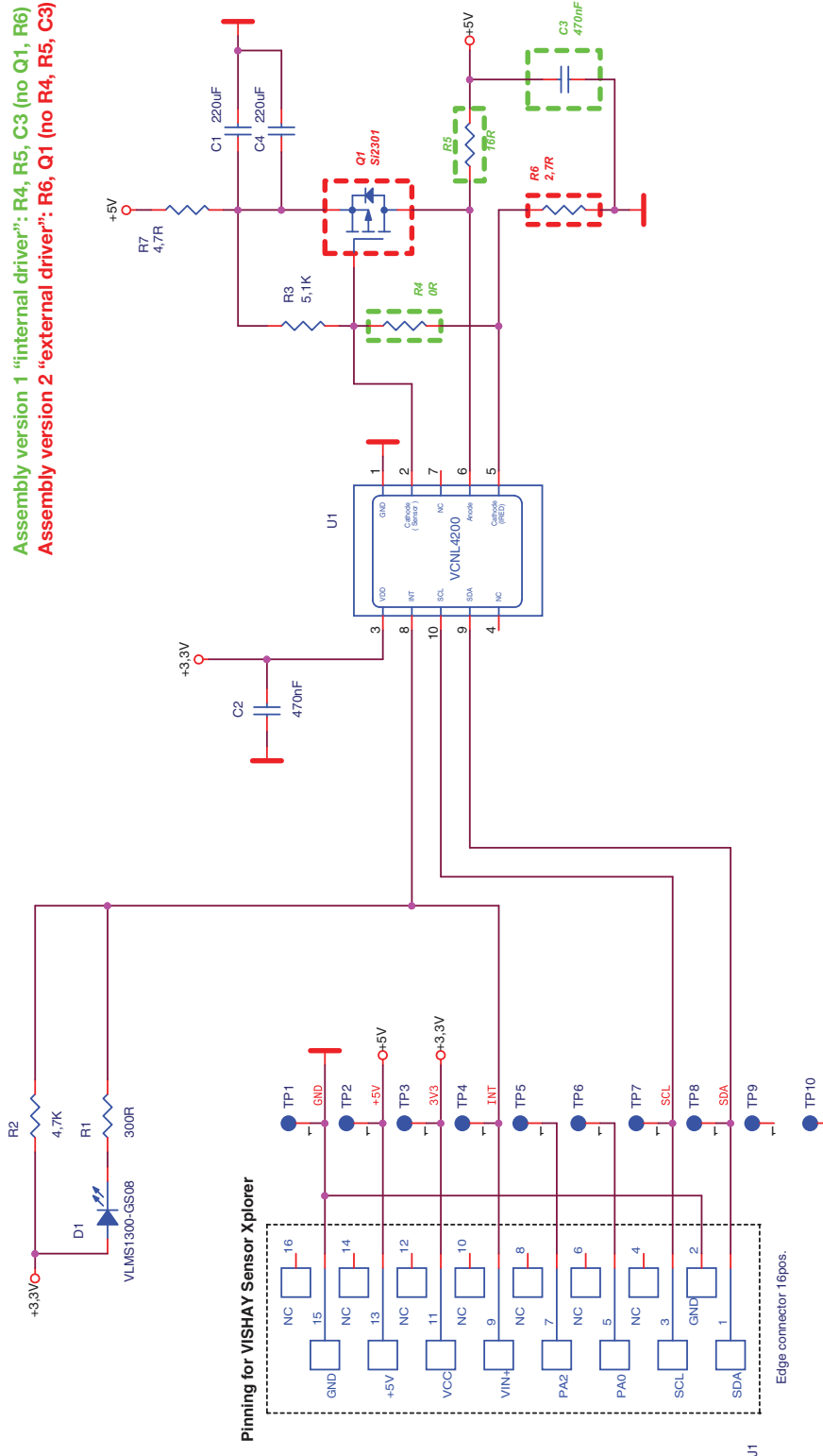


VCNL4200 Sensor Board

SCHEMATIC

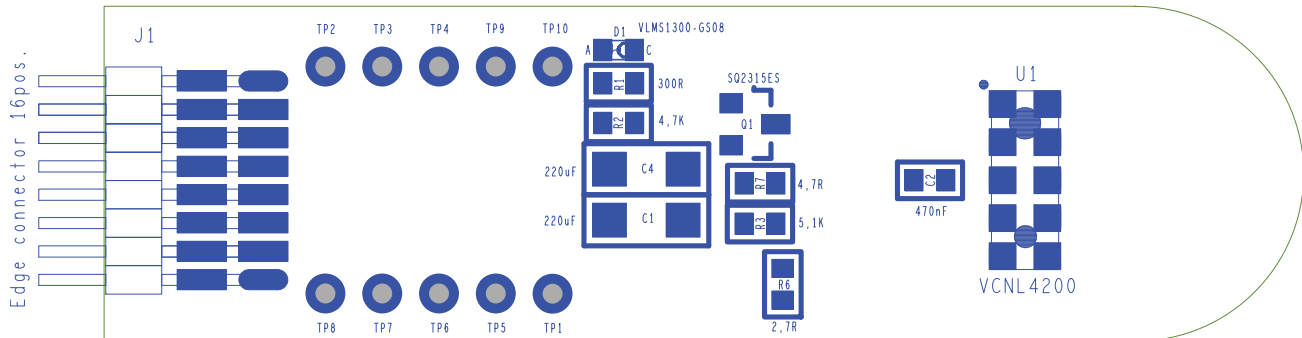


When using the VCNL4200 sensor board without Vishay SensorExplorer™ an additional pullup resistor (2.4 kΩ to 10 kΩ) on SDA and SCL is necessary



ASSEMBLY

VCNL4200 sensor board, rev. 1.0



Assembly top, version 2 (R6, Q2, no R4, R5, C3)

| BILL OF MATERIALS | | | | | |
|-------------------|----------|-----------|-----------------|----------------|------------------|
| ITEM | QUANTITY | REFERENCE | COMPONENT CLASS | VALUE | PACKAGE |
| 1 | 1 | C1 | Capacitor NP | 220 μ F | SMC1206 |
| 2 | 1 | C2 | Capacitor NP | 470 nF | SMC0603 |
| 3 | 1 | C4 | Capacitor NP | 220 μ F | SMC1206 |
| 4 | 1 | D1 | LED red | VLMS1300 | SMD0603 |
| 5 | 1 | R1 | Resistor | 300 Ω | SMR0603 |
| 6 | 1 | R2 | Resistor | 4.7 k Ω | SMR0603 |
| 7 | 1 | R3 | Resistor | 5.1 k Ω | SMR0603 |
| 8 | 1 | R6 | Resistor | 2.2 Ω | SMR0603 |
| 9 | 1 | R7 | Resistor | 4.7 Ω | SMR0603 |
| 10 | 1 | Q1 | Transistor | Si2301 | Si2301 |
| 11 | 1 | U1 | Sensor | VCNL4200 | SMD |
| 12 | 1 | J1 | Edge connector | 2 x 8 pos. | SMD header strip |