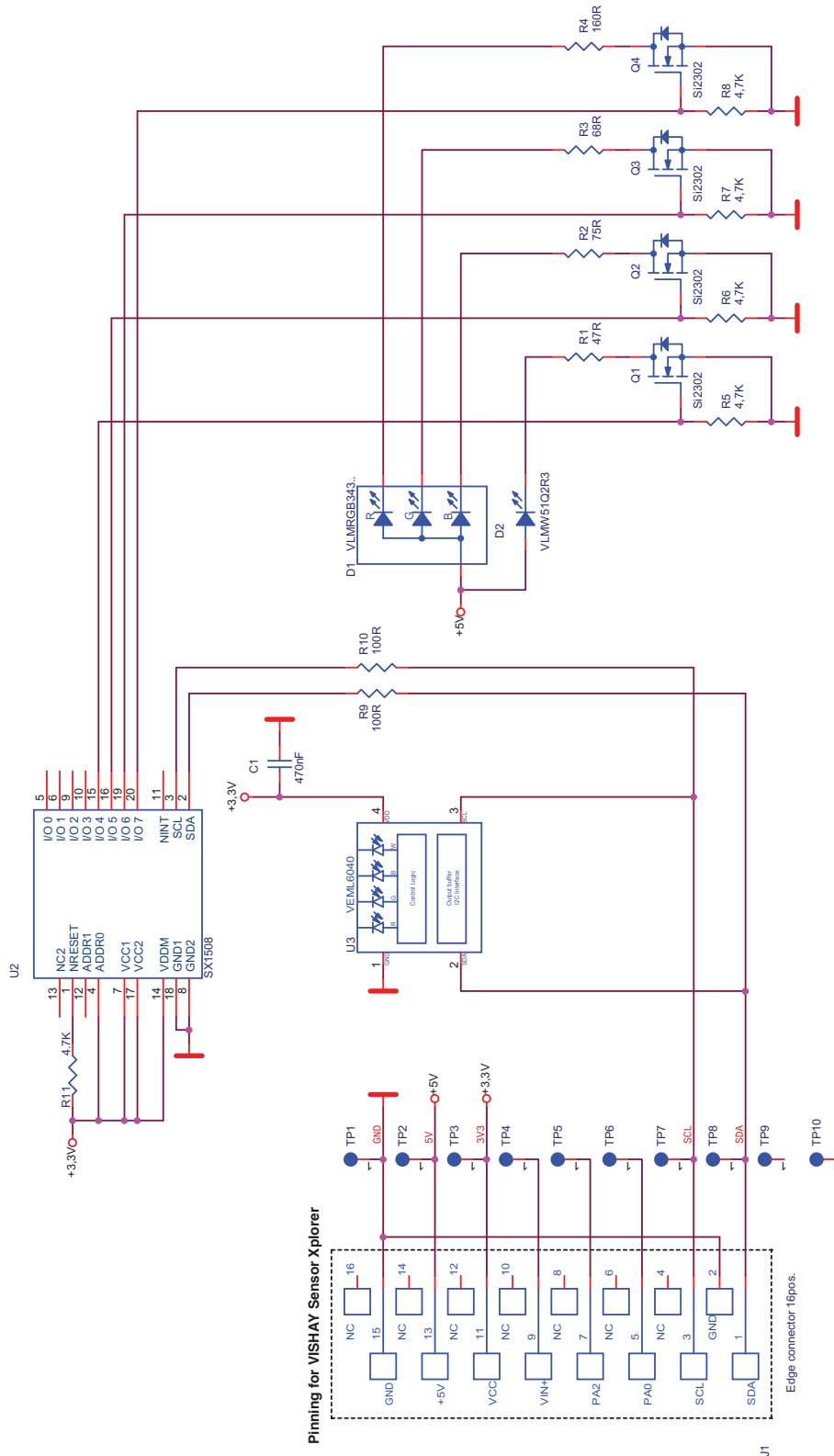


VEML6040 Sensor Board

SCHEMATIC

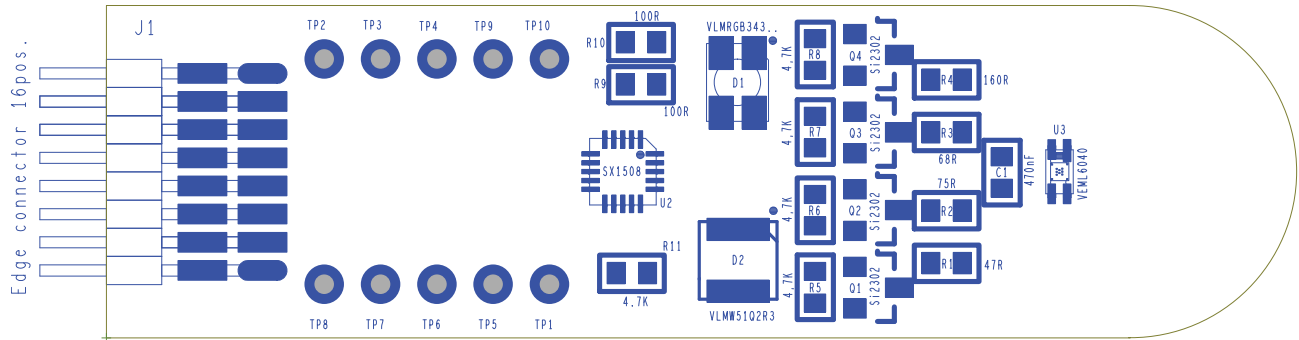


When using the VEML6040 sensor board without Vishay SensorExplorer™ an additional pullup resistor (2.4 kΩ to 10 kΩ) on SDA and SCL is necessary



ASSEMBLY

VEML6040 sensor board, rev. 4.0



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 kΩ | SMR0603 |
| 9 | 1 | R6 | Resistor | 4.7 kΩ | SMR0603 |
| 10 | 1 | R7 | Resistor | 4.7 kΩ | SMR0603 |
| 11 | 1 | R8 | Resistor | 4.7 kΩ | SMR0603 |
| 12 | 1 | R9 | Resistor | 100 Ω | SMR0603 |
| 13 | 1 | R10 | Resistor | 100 Ω | SMR0603 |
| 14 | 1 | R11 | Resistor | 4.7 kΩ | 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 | SX1508 | QFN20 |
| 20 | 1 | U3 | Sensor | VEML6040 | SMD |
| 21 | 1 | J1 | Edge connector | 2 x 8 pos. | SMD header strip |