| ID | Name | Designator | Value | | Footprint | Quantity | Manufacturer | Link | | | | | | | |
|----|------------------------------|-----------------------------|---------------------|-------------|---------------------------|----------|-------------------------------|---|---|---------------------|---------------------|---|-----------------|--|--|
| | 1 Arduino Uno | P1 | | | n.a. | | 1 Arduino | https://www.dig | ikey.nl/nl/products/ | detail/arduino/A0 | 00066/2784006 | | | | |
| | 2 2.5v reference vc U1 | | LM285D-2.5G | | SOIC-8 | | 1 ON Semicon | https://www.dig | https://www.digikey.nl/nl/products/detail/onsemi/LM285D-2-5G/13437135 | | | | | | |
| | 3 3.3v voltage reg | gu U2 | AMS1117-3.3_C426566 | | SOT-223 | | 1 STMicroelectronics | https://www.dig | ikey.nl/nl/products/ | detail/stmicroeled | tronics/LDL1117S | 33R/7102071 | | | |
| | 4 OpAmp | U3 | OPA2376QDGKRQ1 | | VSSOP-8 | | 1 Texas Instruments | https://www.dig | ikey.nl/nl/products/ | detail/texas-instru | uments/OPA23760 | QDGKRQ1/6098 | 067 | | |
| | 5 ADC | U4 | ADS1256IDBR | | SSOP-28 | | 1 Texas Instruments | https://www.dig | ikey.nl/nl/products/ | detail/texas-instru | uments/ADS1256I | DBR/1689177 | | | |
| | 6 LED driver | U5 | TLC59208FIPWR | | TSSOP-16 | | 1 Texas Instruments | https://www.dig | ikey.nl/nl/products/ | detail/texas-instru | uments/TLC59208 | FIPWR/2353643 | <u> </u> | | |
| | 7 Connector | EXTERNAL-DEVICE1 | HDR-F-2.54_2x4 | | HDR-F-TH-2.54-2x4 | | 1 Adam Tech | https://www.dig | ikey.nl/nl/products/ | detail/adam-tech/ | RS2-08-G/98320 | <u>57</u> | | | |
| | 8 Connector | LOGIC-ANALYZER1 | MTF185-205SY3 | | HDR-F-TH-2.54-2x5 (notch) | | 1 Sullins Connector Solutions | https://www.dig | ikey.nl/nl/products/ | detail/sullins-coni | nector-solutions/S | FH11-PBPC-D05 | 5-ST-BK/1990087 | | |
| | 9 Ferried bead | L1 | 0TF | | L0805 | | 1 Taiyo Yuden | https://www.dig | ikey.nl/nl/products/ | detail/taiyo-yuder | n/BK2125HS241-1 | <u>Γ/957809</u> | | | |
| | 10 Crystal | X1 | 7.68 | MHz | HC-49S | | 1 Citizen Finedevice Co Ltd | https://www.dig | ikey.nl/nl/products/ | detail/citizen-fine | device-co-ltd/HC-4 | 49-U-S7680000A | BJB/284204 | | |
| | 11 InGaAs sensor | PHOTODIODE | SD003-151-001 | | 1206 | | 1 Advanced Photonix | https://www.dig | ikey.nl/nl/products/ | detail/advanced-p | ohotonix/003-151- | 001/5222590 | | | |
| | 12 Indicator LED | LED1,LED2,LED3 | | | 0805 | | 3 Wurth | https://www.dig | ikey.nl/nl/products/ | detail/w%C3%BC | Orth-elektronik/150 | 0080VS75000/44 | 89924 | | |
| | 13 Infrared LED | D1 | 855 | nm | 1206 | | 1 Wurth | https://www.dig | ikey.nl/nl/products/ | detail/w%C3%BC | orth-elektronik/154 | 112085A3060P/1 | <u>4554080</u> | | |
| | 14 Infrared LED | D2 | 940 | nm | 1206 | | 1 SunLED | https://www.dig | ikey.nl/nl/products/ | detail/sunled/XZT | NI55W-3/490210 | <u>5</u> | | | |
| | 15 Infrared LED | D3 | 1050 | nm | 1206 | | 1 Marktech Optoelectronics | https://www.dig | ikey.nl/nl/products/ | detail/marktech-o | ptoelectronics/MT | SM5010-843-IR | <u>/5872628</u> | | |
| | 16 Infrared LED | D4 | 1200 | nm | 1206 | | 1 Marktech Optoelectronics | | ikey.nl/nl/products/ | | • | | | | |
| | 17 Infrared LED | D5 | 1300 | nm | 1206 | | 1 Marktech Optoelectronics | https://www.dig | ikey.nl/nl/products/ | detail/marktech-o | ptoelectronics/MT | SM0013-844-IR | /13663042 | | |
| | 18 Infrared LED | D6 | 1450 | | 1206 | | 1 Marktech Optoelectronics | | | | | ts/detail/marktech-optoelectronics/MTSM6014-844-IR/13282619 | | | |
| | 19 Infrared LED | | | | 1206 | | 1 Marktech Optoelectronics | https://www.digikey.nl/nl/products/detail/marktech-optoelectronics/MTSM5015-844-IR/13663050 | | | | | | | |
| | 20 Infrared LED | | | | 1206 | | 1 Marktech Optoelectronics | https://www.digikey.nl/nl/products/detail/marktech-optoelectronics/MTSM5016-843-IR/5872631 | | | | | | | |
| | 21 Resistor | R15,R18,R22,R23,R24 | | ohm | 0805 | | 5 | | | | | | | | |
| | 22 Resistor | R33 | | ohm | 0805 | | 1 | | | | | | | | |
| | 23 Resistor | R4 | | ohm | 0805 | | 1 | | | | | | | | |
| | 24 Resistor | R32 | | ohm | 0805 | | 1 | | | | | | | | |
| | 25 Resistor | R31 | | ohm | 0805 | | 1 | | | | | | | | |
| | 26 Resistor | R26,R27,R28,R29,R30 | | ohm | 0805 | | 5 | | | | | | | | |
| | 27 Resistor | R9,R10 | | ohm | 0805 | | 2 | | | | | | | | |
| | 28 Resistor | R2 | | ohm | 0805 | | 1 | | | | | | | | |
| | 29 Resistor | R8,R13,R14,R16,R17,R19 | | ohm | 0805 | | 6 | | | | | | | | |
| | 30 Resistor | R3 | | ohm | 0805 | | 1 | | | | | | | | |
| | 31 Resistor | R11,R12 | | ohm | 0805 | | 2 | | | | | | | | |
| | 32 Resistor | R1,R7,R25 | | kilo ohm | 0805 | | 3 | | | | | | | | |
| | 33 Resistor | R20,R21 | | kilo ohm | 0805 | | 2 | | | | | | | | |
| | 34 Resistor | R6,R5 | | kilo ohm | 0805 | | 2 | | | | | | | | |
| | 35 Capacitor | C17,C18 | | pico farad | 0805 | | 2 | | | | | | | | |
| | 36 Capacitor | C8,C9 | | pico farad | 0805 0805 | | 2 | | | | | | | | |
| | 37 Capacitor | C15,C16 C13 | | pico farad | 0805 | | 1 | | | | | | | | |
| | 38 Capacitor | | | nano farad | 0805 | | 8 | | | | | | | | |
| | 39 Capacitor 40 Capacitor | C3,C4,C5,C7,C10,C14,C11,C19 | | micro farad | 0805 | | 1 | | | | | | | | |
| | · · | | | | | | 3 | | | | | | | | |
| | 41 Capacitor | C2,C6,C12 | 22 | micro farad | 0805 | | 3 | | | | | | | | |