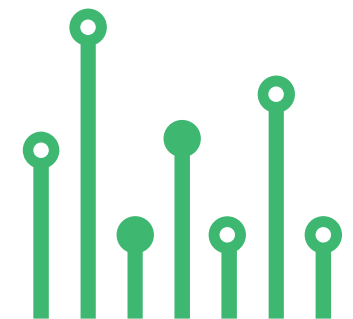THE

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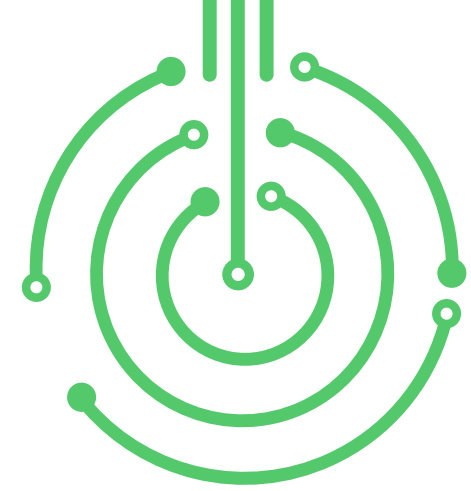Open Source Hardware Electronics Projects

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Air Flow Sensor

SKU: EL143531

Air Flow Sensor

This airflow sensor consists of INA326 precision instrument amplifier, double 100uA REF200 current sources, and a REF3025 2.5V reference voltage chip. Airflow dynamics dictate how much the voltage will increase or decrease for a given airflow rate. Therefore, the relationship between temperature and flow rate would have to be established for a method such as this to be useable. Two IN4148 diodes are used to sense the temperature, Diode D3 should be in static air and Diode D2 should be installed in the airpath flow path. The circuit works with 5VDC and draws a few mA of current. REF3025 provides an accurate reference voltage which is 2.5V. Temperature linearity is within a tenth of a degree. The airflow is correlated to the change in D2 voltage. D2's junction temperature and voltage are related to the airflow. D2 and D3 should be in the same temperature environment.
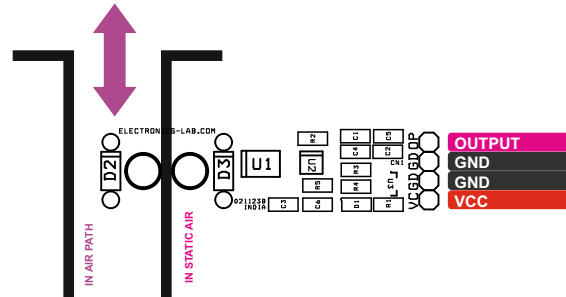
FEATURES

- Power Supply 5V DC
- Diode Junction Temperature 0 – 70Degree
- Output 1V to 1.75V (1.25 @ 27 Degree Centigrade)
- PCB Dimensions 45.40 X 11.91MM
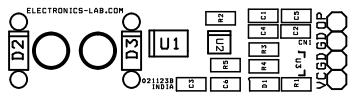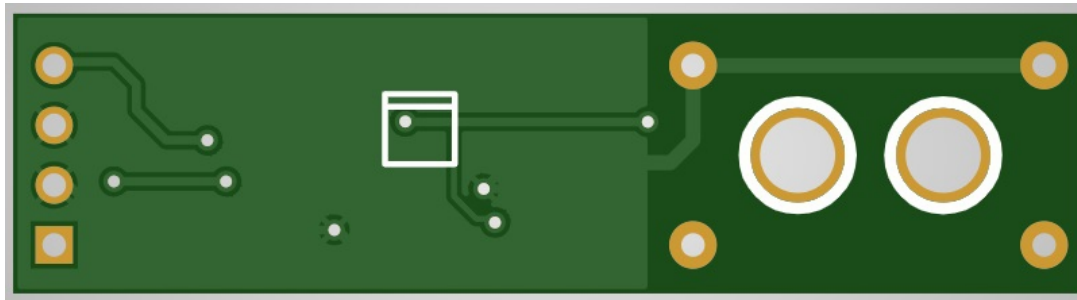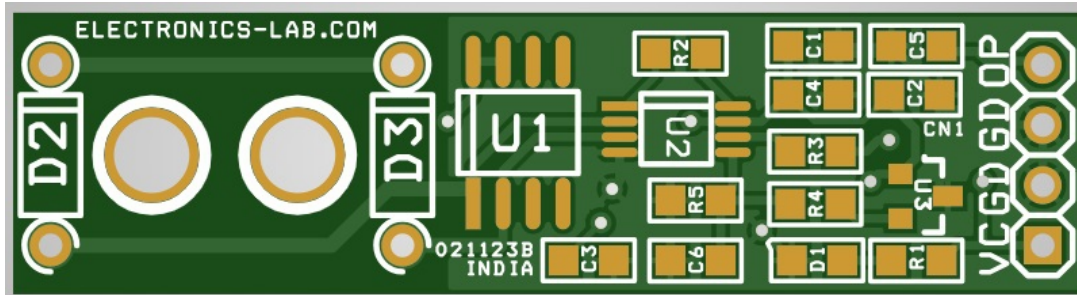- 2X3MM Mounting Holes

Schematic

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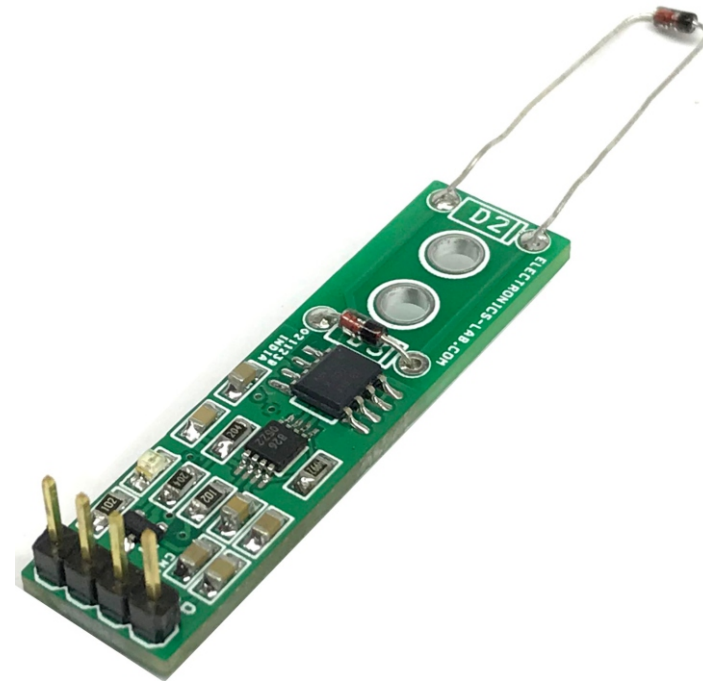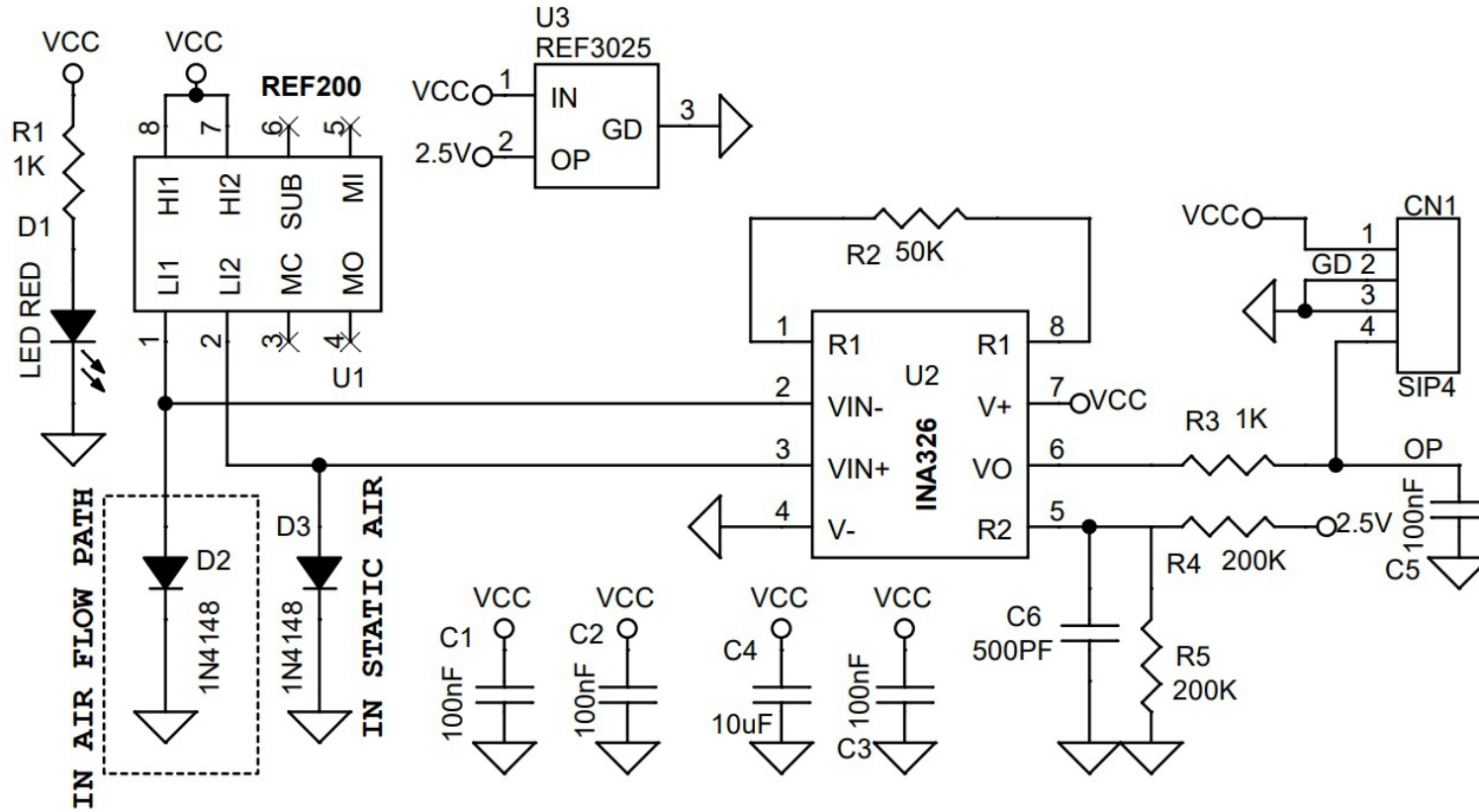
Connections

FEATURES

- CN1: Pin 1 = VCC, Pin 2 = GND, Pin 3 = GND, Pin 4 = Output
- D2: Air Flow Path Temperature Sensor
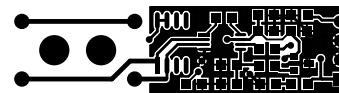- D3: Static Air Temperature Sensor
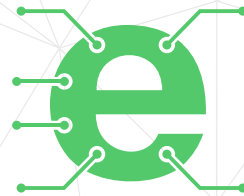- D1: Power LED

PCB

SILK SCREEN TOP

BOTTOM LAYER

TOP LAYER

PCB DIMENSIONS 45.40 X 11.91MM

Open Source Hardware Projects

Notes

APP
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Android App

DOWNLOAD

Android App launched in 2017 and has 100k+ downloads - rated with 4.5 stars.

SCAN QR CODE

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