

# Fermion SHTC3 Temperature & Humidity Sensor

SEN0414

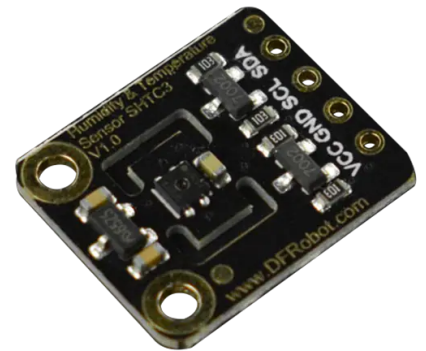
## Product Overview

02/13/2023

For the most up-to-date information, visit [www.mouser.com](http://www.mouser.com) or the supplier's website.

## Description

DFRobot Fermion SHTC3 Temperature and Humidity Sensor is a digital humidity sensor from Sensirion that offers consistent high accuracy. The sensor covers a humidity measurement range of 0 to 100%RH and a temperature detection range of -40°C to 125°C with a typical accuracy of  $\pm 2\%$  CRH and  $\pm 0.2^\circ\text{C}$ . The board supply voltage of 3.3V to 5V and a current consumption below 0.15mA in low power mode make the SHTC3 suitable for mobile or wireless battery-driven applications.



## Features

- High accuracy
- Low power mode

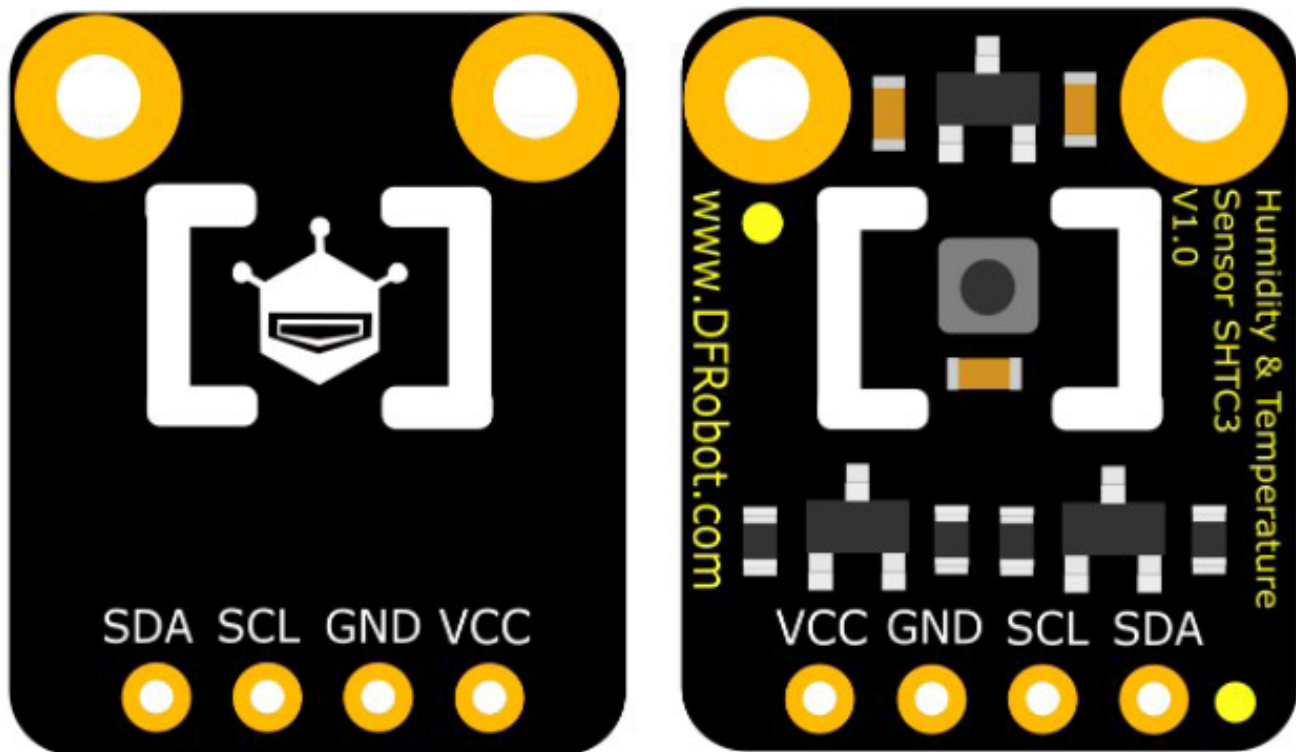
## Specifications

- Communication interface: I<sup>2</sup>C
- Operating voltage: 3.3V~5V
- Operating current: 0.45mA
- Humidity measurement range: 0~100%RH
- Humidity measurement accuracy:  $\pm 2\%$
- Temperature measurement range: -40°C ~ 125°C (-40°F ~ 275°F)
- Temperature measurement range:  $\pm 0.2^\circ\text{C}$
- Response time: 8s ( $\tau_{63\%}$ )
- Dimension: 14mm x 17mm / 0.55" x 0.67"
- Mounting hole size: M2 (2mm)
- Mounting hole pitch: 10mm

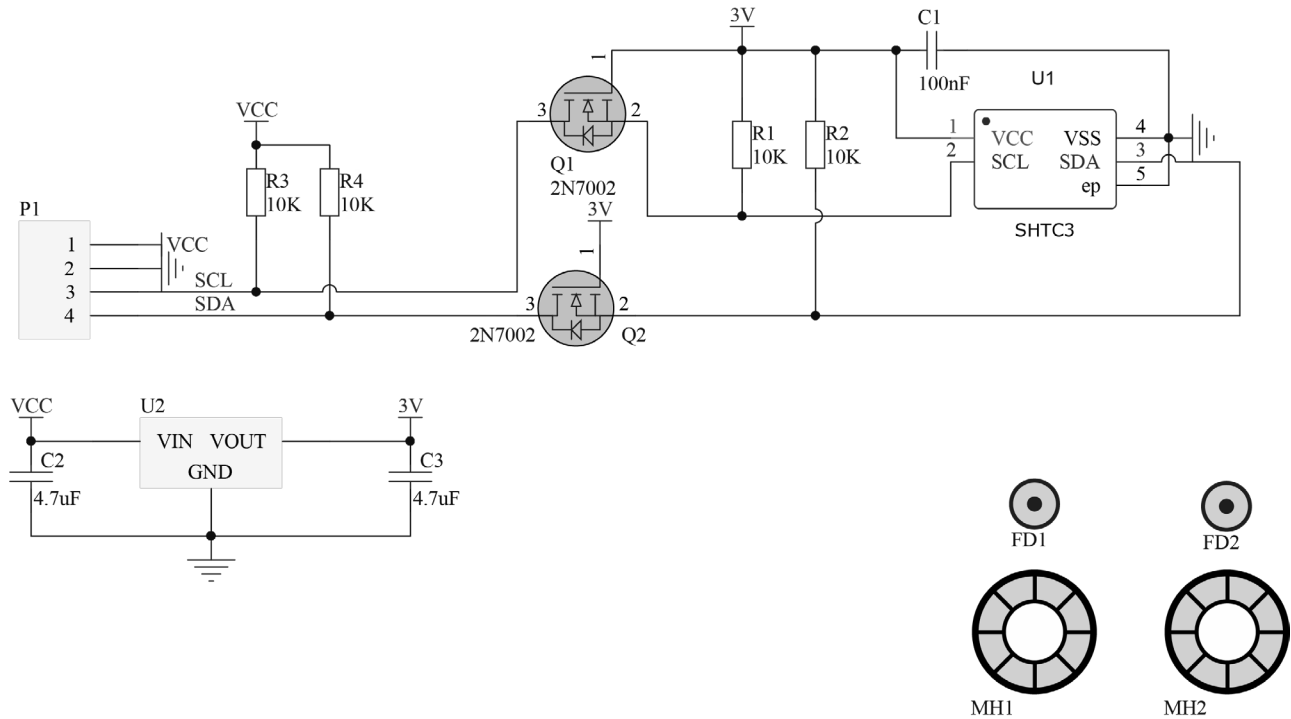
## Applications

- HVAC
- Automobiles
- Data loggers
- Weather stations
- Home appliances

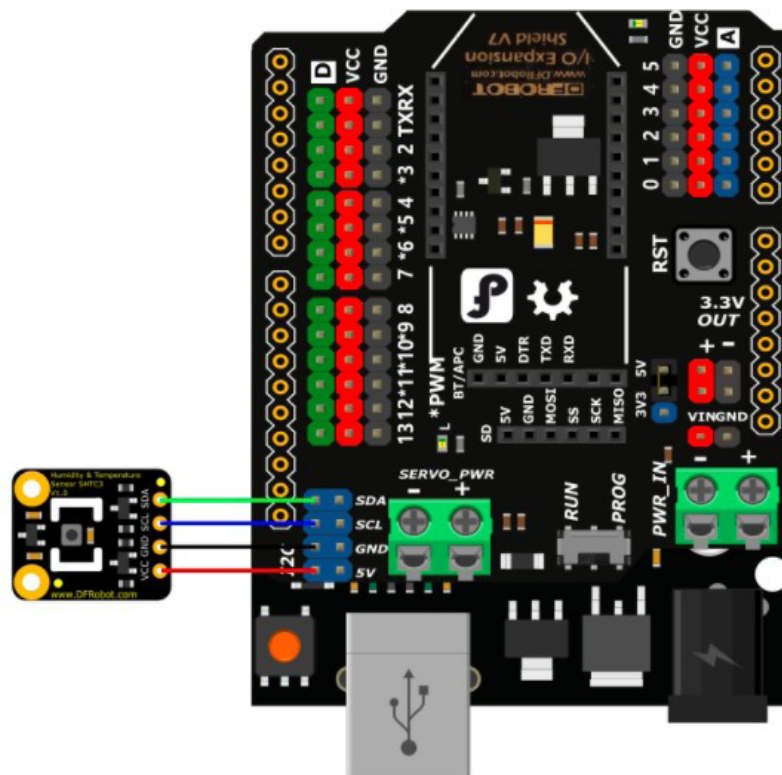
## Board Overview



## Schematic



## Connection Diagram



## Mouser Part Number

[View Part](#)

To learn more, visit <https://www.mouser.com/new/dfrobot/dfrobot-fermion-shtc3-sensor/>