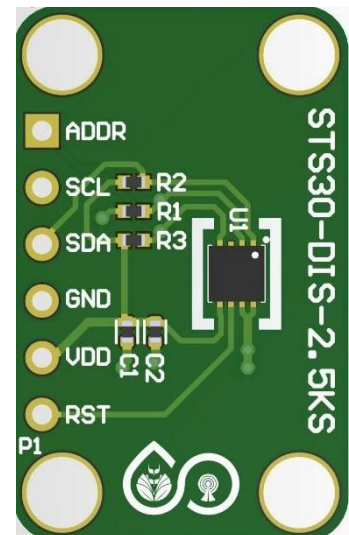# STS30
## TEMPERATURE AND HUMIDITY SENSOR

## GENERAL DESCRIPTION

The STS30-DIS-2.5 sensor is a digital temperature and humidity sensor designed to accurately measure environmental conditions. It utilizes a digital interface, such as I2C to communicate with microcontrollers or other host devices. Its functionality includes enhanced signal processing, two distinctive and user selectable I2C addresses and communication speeds of up to 1 MHz Additionally, the wide supply voltage range of 2.15 V to 5.5 V compatibility with a wide range of applications.

## TECHNICAL SPECIFICATIONS

- Wide supply voltage range, from 2.15 V to 5.5 V
- I2C Interface with communication speeds up to 1 MHz and two user selectable addresses
- Accuracy of up to ±0.1 °C
- Input Current: ±100 mA
- Operating temperature range: -40 to 125°C



## PIN DESCRIPTION

| Name | Comments |
|------|----------|
| SDA | Serial data; input / output |
| ADDR | Address pin; input; connect to either logic high or low, do not leave floating |
| SCL | Serial clock; input / output |
| VDD | Supply voltage; input |
| nRESET | Reset pin active low; input; if not used it is recommended to be left floating; can be connected to VDD with a series resistor of R ≥2 kΩ. |
| VSS | Ground |

## APPLICATIONS

- IoT & Environmental Monitoring
- Medical Equipment
- Smart batteries
- HVAC & Refrigeration Systems
- Telecom