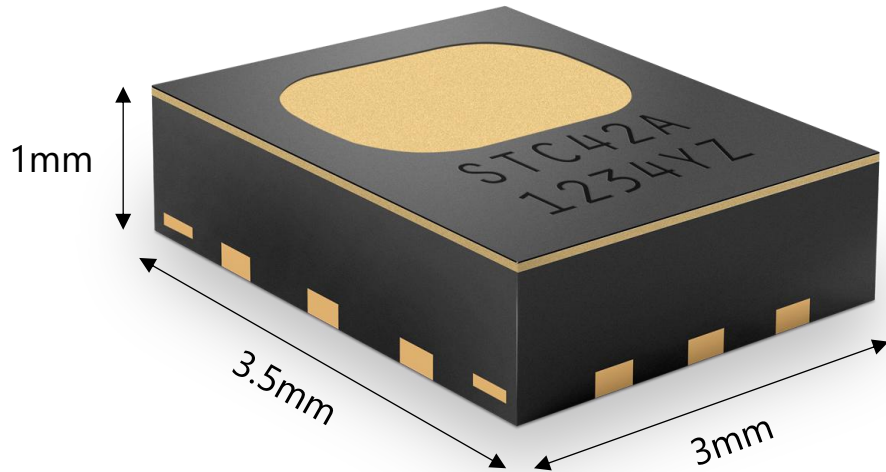# SEK-STC42A-SENSOR – QUICK START GUIDE

SENSIRION

STC42A Sensor Specifications

Automotive-Grade Hydrogen Sensor for Thermal Runaway Detection

Measurement Principle: Thermal Conductivity

Accuracy: ± (0.4vol% + 2% of reading)

H_2 range: 0 – 40vol%

Typical response time: 1s (τ63)

Supply voltage: 3.3V DC

Avg current consumption: <0.7mA [1]

Automotive compliant: AEC-Q100 Grade 2

[1] Continuous measurement mode at 1Hz - and **<7µA** in low-power mode at 0.03Hz.

1mm

3.5mm

3mm

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SENSIRION
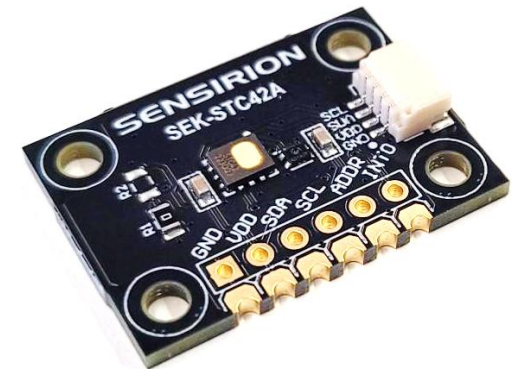
How to get started: SEK-STC42A-Sensor (Evaluation Kit)

"

"The SEK-STC42A evaluation kit represents the perfect tool kit for effective STC42A sensor evaluation and efficient prototyping."

Adapter Cable to SensorBridge

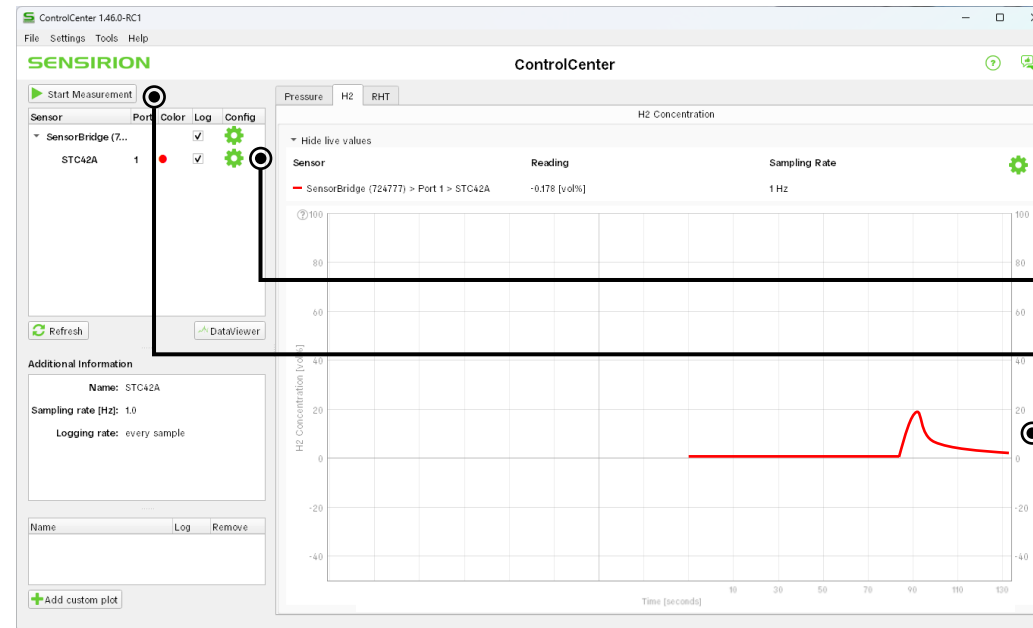Jump Wire Set, incl. 10p Gender Changer

STC42A Development Board

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SENSIRION

Quick Start Guide for SEK-STC42A Development Board

More info on https://sensirion.com/products/catalog/SEK-STC42A

Evaluation with ControlCenter

- Plug & Play measurements

- Real-time signal plotting

- Automatic data logging

- Configure sensor

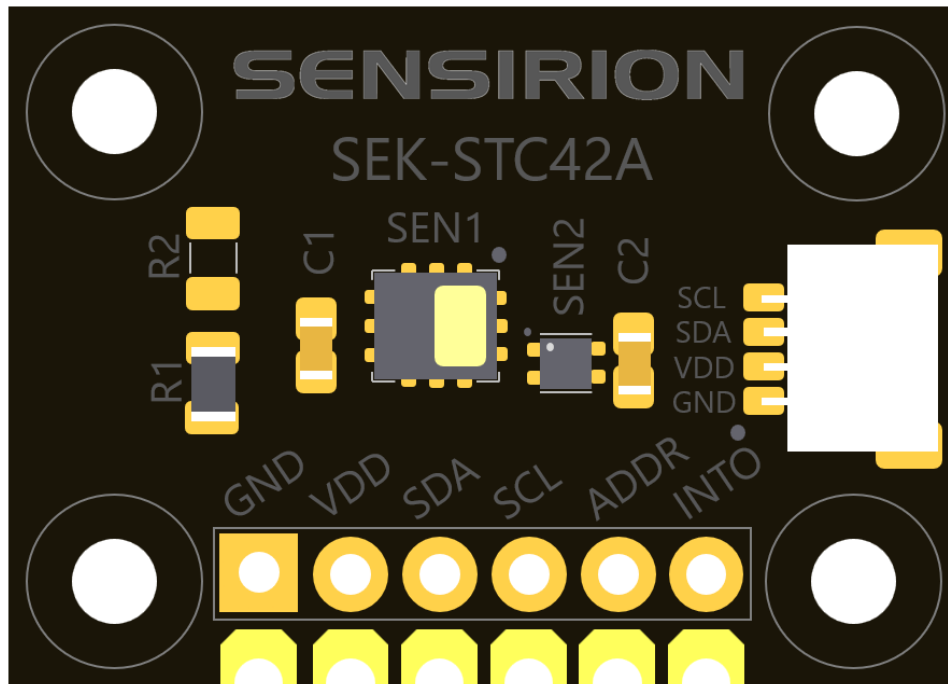

Sensor settings

Start Measurement

H₂ Output

Control Center

SEK-STC42A

Sensor Bridge

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SENSIRION

Connecting your STC42A Development Board to a Computer

Sensirion Sensor Bridge
(<u>not</u> included in SEK-STC42A)

USB port

Adapter Cable
(included in SEK-STC42A)

STC42A Development Board
(included in SEK-STC42A)

Computer
Windows/Mac/Linux
(not included in SEK-STC42A)

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SENSIRION
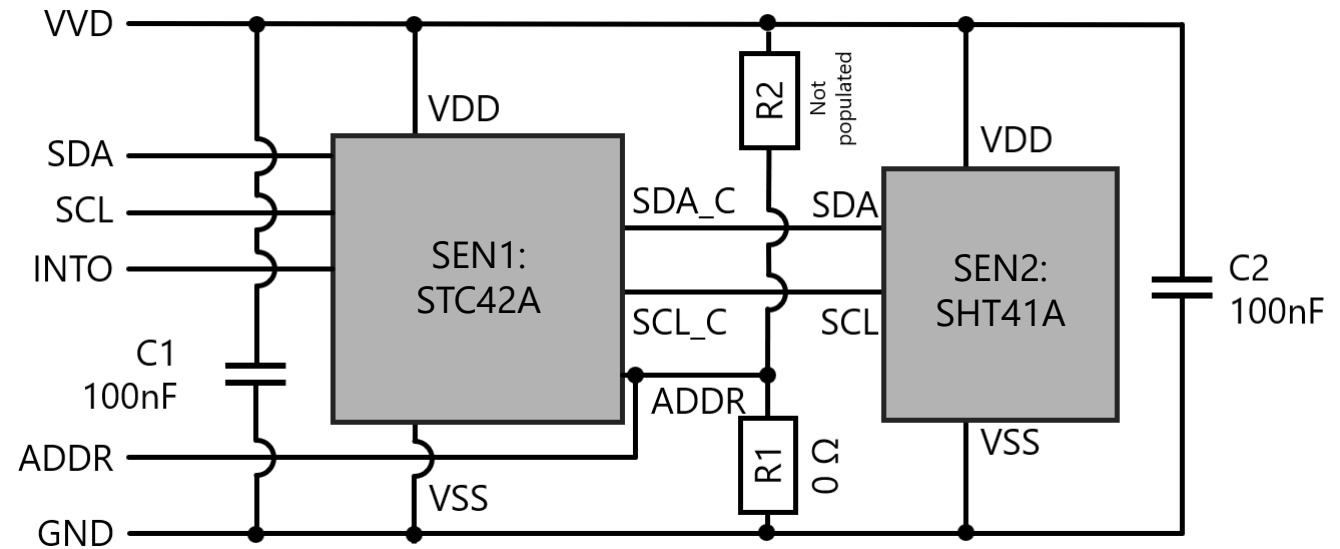
Application Circuit

SEK-STC42A

Eval Board Illustration

Application Circuit

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