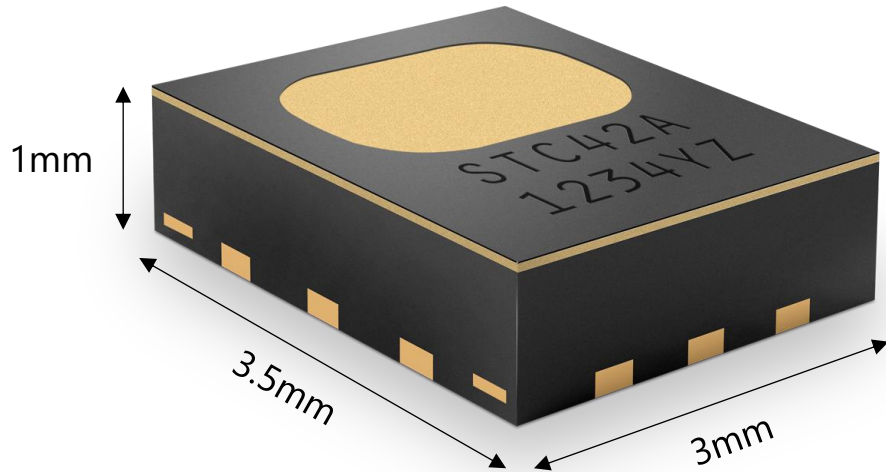


SEK-STC42A-SENSOR – QUICK START GUIDE



SENSIRION

STC42A Sensor Specifications



Automotive-Grade Hydrogen Sensor for Thermal Runaway Detection

Measurement Principle: Thermal Conductivity

Accuracy: $\pm (0.4\text{vol}\% + 2\% \text{ of reading})$

H₂ range: 0 – 40vol%

Typical response time: 1s (τ_{63})

Supply voltage: 3.3V DC

Avg current consumption: $<0.7\text{mA}$ ¹⁾

Automotive compliant: AEC-Q100 Grade 2

¹⁾ Continuous measurement mode at 1Hz - and $<7\mu\text{A}$ in low-power mode at 0.03Hz.

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

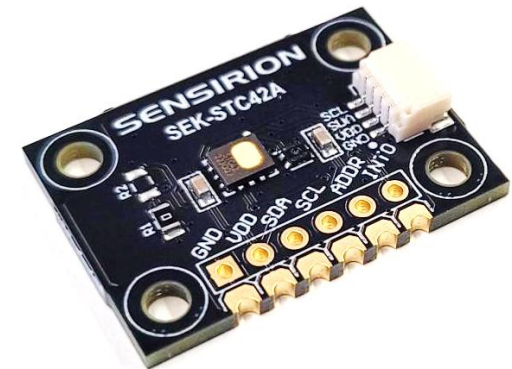


“The SEK-STC42A evaluation kit represents the perfect tool kit for effective STC42A sensor evaluation and efficient prototyping.”



Adapter Cable to
SensorBridge

Jump Wire Set, incl.
10p Gender Changer



STC42A Development Board

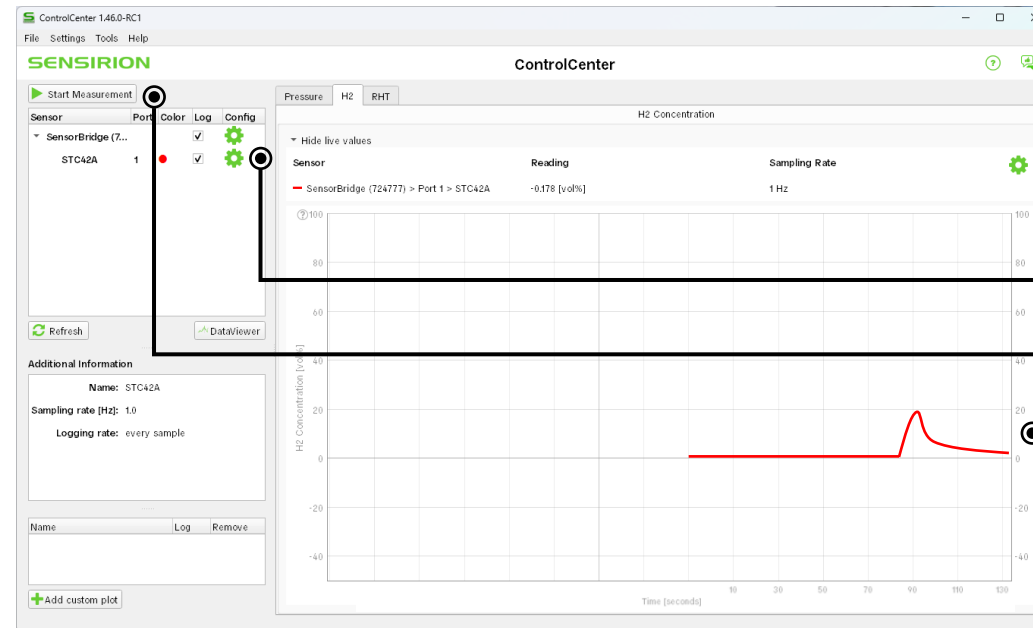
Quick Start Guide for SEK-STC42A Development Board

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



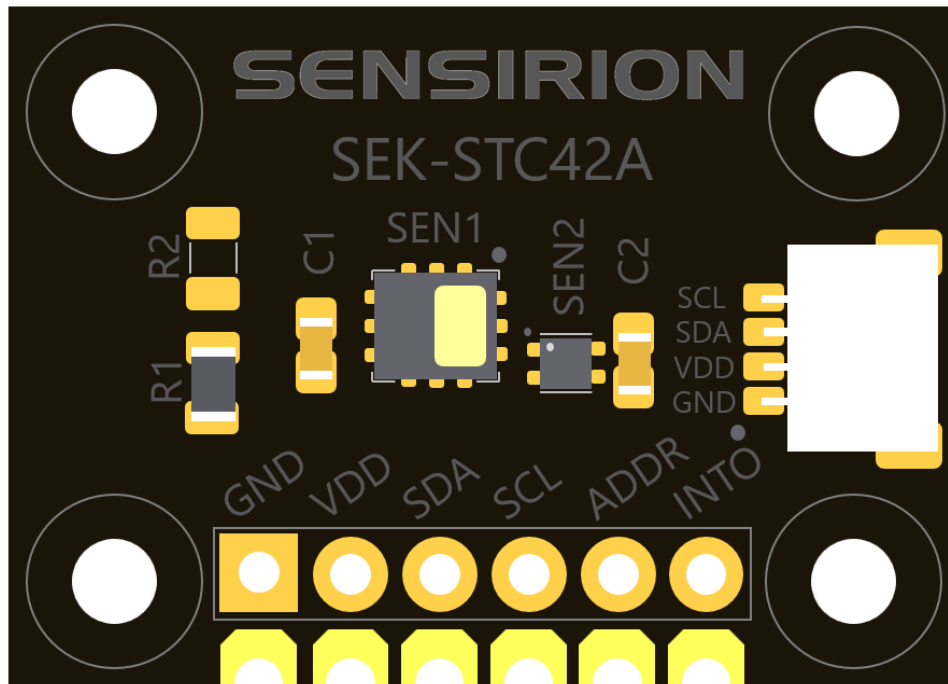
Connecting your STC42A Development Board to a Computer



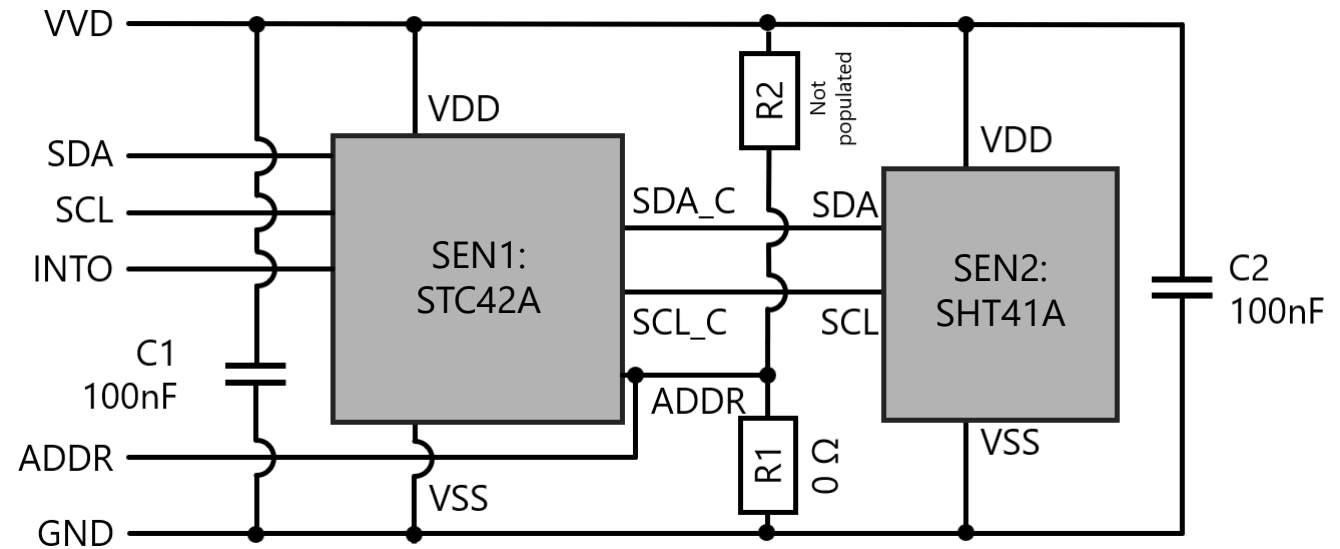
Application Circuit

SEK-STC42A

Eval Board Illustration



Application Circuit



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