



## IQS624/5EV04 Overview

Hall effect angle sensor with dual channel capacitive proximity/touch controller

The IQS624 and IQS625 ProxFusion® IC's are multifunctional capacitive, inductive and Hall effect sensors designed for applications where any or all of the technologies may be required. The Hall effect sensors calculate the angle of a magnet rotating parallel or perpendicular with the IC, creating a contactless 360° rotation sensor. The IQS624 and IQS625 are ultra-low power Hall effect rotation sensors. These sensors are fully I<sup>2</sup>C compatible and on-chip calculations enable the IC's to stream the current angle/interval of the magnet without extra calculations.

### EV-Kit Overview

- Both the IQS624 and IQS625 are available for evaluation
- Hall effect rotation sensing
  - Wheel and magnet included
- Capacitive sensing
  - Touch and Proximity embedded
- Azoteq CT210A Dongle for data streaming to a real-time GUI

### Evaluation Modes

- Connect to PC GUI via CT210/CT210A/DS100 USB Dongle
  - Raw info displayed in GUI
- Plug into Arduino Uno<sup>1</sup> or ST Nucleo<sup>1</sup>
  - Sensor info displayed on 7-segment
  - Open source code for custom development ([website](#))
- Realign wheel to ensure magnet is positioned over IQS624 or IQS625 when evaluating performance



**IQS624/5 Shield**



**Azoteq CT210A**

### Applications

- Mouse wheel
- Anemometer
- Dial or selector knob
- Gaming steering wheel
- Measuring wheel
- Digital angle gauge
- Speedometer for bicycle
- Tablet/Laptop hinge

<sup>1</sup> Sold separately