# IQ Switch® ProxFusion® Series



## **IQS624EV04 Overview**

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

The IQS624 ProxFusion® IC is a multifunctional capacitive, inductance and Hall Effect sensor designed for applications where any or all of the technologies may be required. The two Hall-effect sensors calculate the angle of a magnet rotating parallel with the IC. The IQS624 is an ultra-low power hall-effect rotation sensor. The sensor is fully I²C compatible and on-chip calculations enable the IC to stream the current angle of the magnet without extra calculations.

#### **EV-Kit Overview**

- Hall-effect sensing
  - Wheel and magnet included
- Capacitive sensing
  - o Touch and Proximity embedded

### **Evaluation Modes**

- Connect to PC GUI via CT210A USB Dongle (included in the EV04 Kit)
- When connected to CT210A use 3.3V (default) only<sup>2</sup>
  - o Raw info displayed in GUI
- Please ensure Shield Board<sup>3</sup> is unplugged from Arduino Uno /ST Nucleo when connected to CT210A
- 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)



IQS624 Shield + Arduino Uno<sup>1</sup>

**IQS624 Shield Board** 

**Azoteq** 

ProxFusion<sup>1</sup>

**IQS624 Shield** 

# **Applications**

- Mouse wheel
- Anemometer
- Dial or Selector knob
- Gaming steering wheel

- Measuring wheel
- Digital angle gauge
- Speedometer for bicycle

<sup>&</sup>lt;sup>1</sup> Sold separately

<sup>&</sup>lt;sup>2</sup> 1.8V not supported on Shield Board due to diode protection

<sup>&</sup>lt;sup>3</sup> Shield Board does not support programming