

IQ Switch® ProxFusion® Series



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 I²C 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
 - o 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
 - o Raw info displayed in GUI
- Plug into Arduino Uno¹ or ST Nucleo¹
 - 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



Applications

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

- Measuring wheel
- Digital angle gauge
- Speedometer for bicycle
- Tablet/Laptop hinge

¹ Sold separately