

IQS370

The IQS370 ProxFusion® IC is a four-channel I2C inductive sensing device. This IC is aimed at inductive sensing applications that require an absolute encoder/slider. The sensor is fully I2C compatible, and on-chip calculations enable the IC to respond effectively even in its lowest power mode.



OVERVIEW

1.1 Main Features

- **4 (QFN) external sensor pad connections**
- **External sensor options:**
 - One inductive slider
 - One absolute encoder
- **Built-in basic functions:**
 - Automatic calibration
 - Automatic biasing
 - Noise filtering
 - Movement trigger indication
- **Built-in signal processing options:**
 - Slider position/encoder position
 - Slider movement state / Encoder movement state
- **Design simplicity:**
 - Configurable channel bias voltage using an external input pin
 - One-time programmable settings for custom IC configuration (MOQs apply)
- **Supply voltage range:**
 - 1.71 V to 3.5 V (FOSC = 14 MHz, default option)
 - 2.2 V to 3.5 V (FOSC = 18 MHz)
 - The main oscillator is adjustable in I²C and impacts the voltage limits
- **Small packages:**
 - QFN20 (3 × 3 × 0.55 mm) – 0.4 mm pitch

1.2 Applications

- **Waterproof inductive slider/dial/counter applications**
- **Wearables**
- **Smart home controllers**
- **White goods user interface**