

IQS318

The IQS318 ProxFusion® IC is a standalone and I2C sensing device for single channel proximity or touch sensing requirements. The sensor is configurable via external input pins and on-chip calculations enable the IC to respond effectively in various use cases.



OVERVIEW

Main Features

- Multiple user interface options: Single channel I2C / standalone inductive switch (with long term activation: IQS318-0xx) • Single channel I2C / standalone inductive button / single level trigger (IQS318-1xx) • Single channel I2C / standalone inductive snap button (IQS318-2xx) • Single channel I2C / standalone self-capacitive switch (with long term activation: IQS318-5xx)
- 1 (self) / 2 (inductive) external sensor pad connection
- Built-in basic functions: • Automatic tuning • Noise filtering • Debounce & hysteresis
- Built-in signal processing options: • Single I2C touch/proximity output • Single standalone touch output
- Design simplicity
- Configurable channel sensitivity, sample period, threshold, and charge transfer frequency using external input pins
- One-time programmable settings for custom IC configuration (MOQs apply)
- I2C debugging interface with IRQ/RDY(up to fast plus -1MHz)
- Supply voltage 1.71V to 3.5V
- Package options
- WLCSP11 (1.48 x 1.08 x 0.345 mm) - interleaved 0.35mm x 0.35mm ball pitch
- DFN12 (3 x 3 x 0.75 mm) - 0.5mm pitch
- QFN20 (3 x 3 x 0.55 mm) - 0.4mm pitch RoHS2 Compliant WLCSP11, DFN12 & QFN20 packages Representation only

Applications

- General-use button/switch
- Wear detection
- Backlight activation
- Tamper switch (release detection)
- Snap button