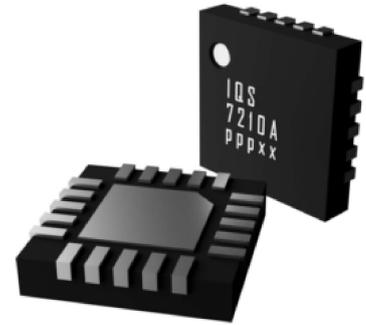


IQS7210A

The IQS7210 ProxFusion® IC is a sensor fusion device targeting the wearable fitness market. A low-power dedicated wake-up touch button launches full trackpad/touchscreen (up to 42 channel) sensing integrated with wear detect, force touch and Hall sensing capabilities, with best in class sensitivity and power consumption. Other features include automatic tuning and long-term activation with environmental tracking.



OVERVIEW

PRODUCT INFORMATION NOTICE

Main Features

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 - Highly flexible ProxFusion® device
 - 12(QFN) / 10(WLCSP) external sensor pad connections
 - Self/Mutual capacitive sensors configuration for display wake-up
 - Inductive or capacitive button configuration
- ULP wake-up on touch
 - Wake-up on screen/trackpad and/or
 - Wake-up on button touch/press
- Sensor flexibility
 - Automatic sensor tuning for optimum sensitivity
 - Internal voltage regulator
 - reference capacitor
 - On-chip noise filtering
 - Detection debounce and hysteresis
 - Wide range of capacitance detection
- Trackpad/Touchscreen
 - Up to 2 fingers tracking
 - High resolution coordinate outputs
 - Fast response: Coordinate report rate up to 100Hz
 - Individual sensor touch (for up to 25+1 touch key applications)
 - Integrated touch size output (area and strength) for touch integrity
 - Single finger gesture recognition engine
 - Electrode mapping for optimal PCB layout
 - Configurable coordinate resolution and orientation
 - Compatible with wide range of overlay materials and thicknesses

- Compatible with multiple 1-and 2-layer sensor patterns
- Adjustable sensing frequency offset for limiting potential display interference
- No calibration required - systems automatically compensated for mechanical & temperature changes
- Water immunity features
- Inductive/Capacitive button
 - Inductive (metal detection/force sensing) or
 - Capacitive (mutual- or self-capacitive touch sensing)
- Design and manufacturing support
 - Touch pattern layout drawing
 - Full FPC layout package (example & customized)
 - Test guide for touch pattern
 - RFI immunity design support

Applications

- Fitness Bands
- True Wireless Stereo (TWS) earbuds