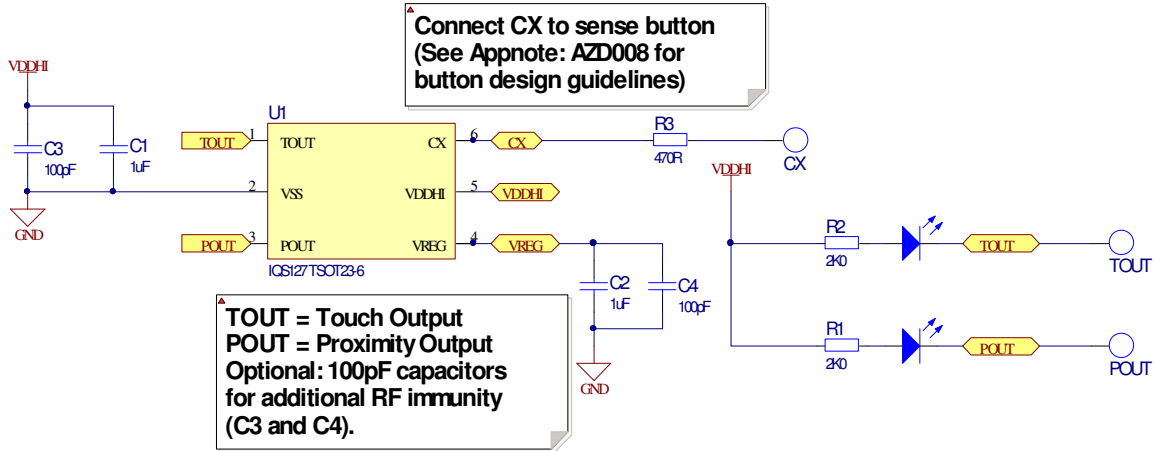


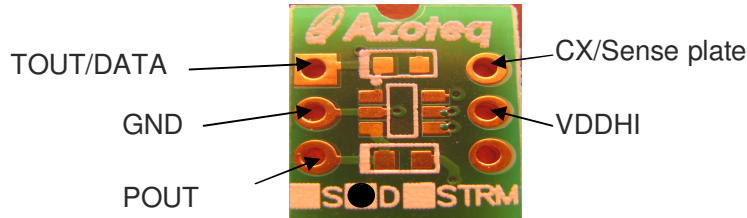


## IQS127D on AZP112A05 Connection Guide

### 1 IQS127D on AZP112A05

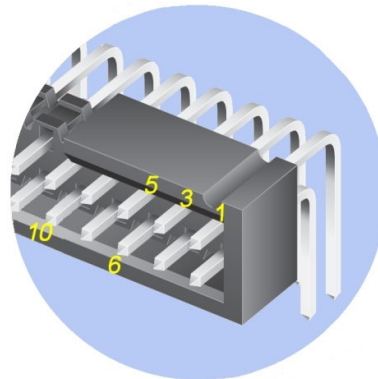


### 2 PCboard (AZP112A05)



### 3 CT-Tool Connections

IQS127 pins	CT200 / CT220 pins	
	Programming	Streaming
GND	1	1
VDDHI	3	3
POUT	5	
CX	6	
TOUT/DATA		10





The IQS127 ProxSense® IC is a fully integrated capacitive sensor device in 3 varieties:

- IQS127D:** Dual outputs (Touch button AND Proximity sensor).
- IQS127S:** Touch button OR Proximity sensor incorporating a Driven Shield.
- IQS127C:** Touch and Proximity sensor for metal overlays.

## Features

- Automatic **Antenna Tuning Implementation (ATI)** - Automatic adjustment for optimal performance.
- Internal **Capacitor Implementation (ICI)** – reference capacitor on-chip
- Low Power, suitable for battery applications
- Supply voltage: 2.95V to 5.5V
- Advanced on-chip digital signal processing
- User selectable:
  - 4 Power Modes (13uA min)
  - IO sink / source
  - Time-out for stuck key
  - Output mode (Direct / Latch / Toggle)
  - Proximity and Touch Button sensitivity settings
- Minimum external components
- Keys:
  - Touch: 5mm x 5mm or larger (overlay thickness dependent)
  - Proximity: Various electrical options (wire / PCB trace / ITO / conductive foil)
  - Dielectric: Various non-metal materials (i.e. glass, plastic, painted surfaces)
  - Dielectric thickness: 6 mm plastic, 10 mm glass
- 1-Wire data streaming

## Contact Information

Please visit [www.azoteq.com](http://www.azoteq.com) for comprehensive datasheets, application notes, reference designs and a list of distributors for your region.