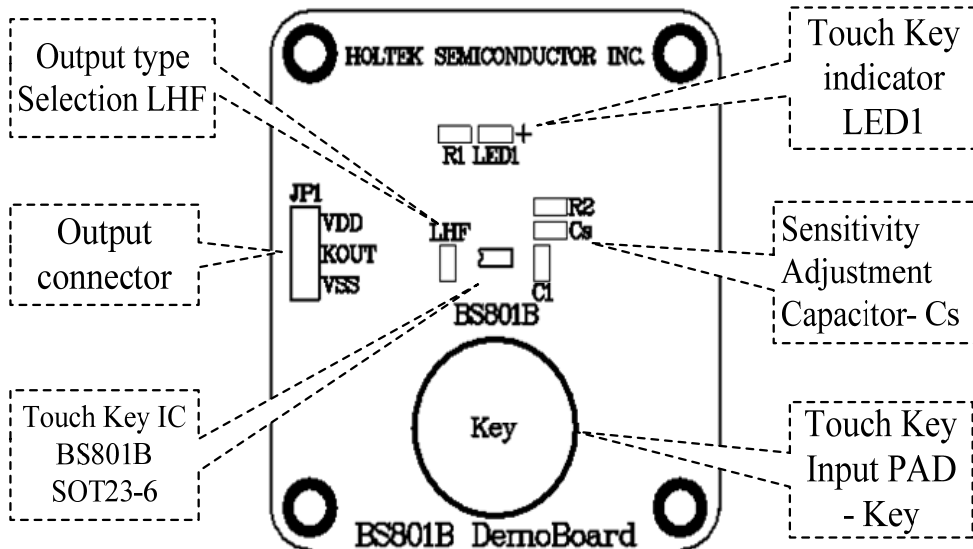


HOLTEK Touch Key IC Demo Board

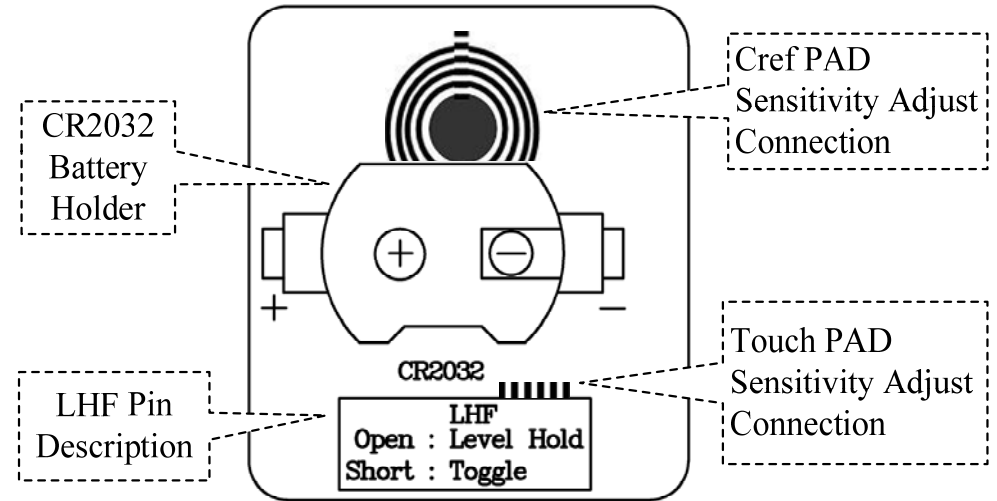
BS801B User Manual

Components Description

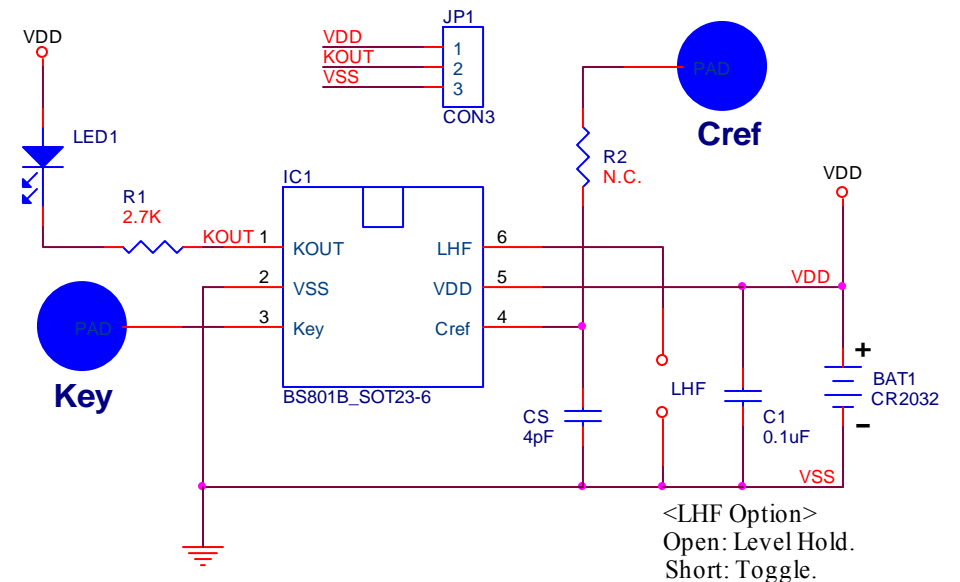
● Demo Board–Top Side



● Demo Board–Bottom Side



Circuit Diagram



Operating Guide

- Pull out the insulator between battery and battery holder to power up the Demo Board. (**Ensure that not touching any component when doing this.**)
- After a key touch action has been verified then the output indicator LED1 and the KOUT pin will be activated with a **LEVEL HOLD** output.
- The relationship between LHF, the output LED1 status and the KOUT pin is shown in the following table:
 1. LHF floating – selects Level Hold output

Touch Key Condition	LED1	KOUT pin status when connected to pull-high
Key is touched	On	0V
Key is not touched	Off	3.0V

2. LHF pulled low – selects Toggle output

Touch Key Condition	LED1	KOUT pin status when connected to pull-high
Key is touched	Changes State	Changes state
Key is not touched	No change	Remains in present state

- Using "Touch PAD sensitivity adjust connections" to modify the sensitivity of each key.

Purpose of this Demo Board

- Verify the Touch Key sensitivity and response time.
- Determine the Sense PAD external casing material thickness.
- Determine the sense PAD area.
- Test the Touch Key IC Specification Characteristics.
- Provide the customer with a Touch Key related PCB Layout for consultation.
- Provide the customer with a demonstration and evaluation.

Troubleshooting

When in use the following problems may be encountered:

Problem	Potential Solution
No actions after battery is installed	Check that whether the battery is not inserted correctly or with the wrong polarity, has poor contacts or has no power.
Abnormal LED action	When a touch action results in abnormal LED illumination, re-install the battery to re-activate or wait for about 40 seconds after which the LED will automatically extinguish.
LED uneven	The CR2032 is low on power and should be replaced.

Accessories & Specifications

- **Accessories**

BS801B Touch Key IC Demo Board (**includes a BS801B SOT23-6 IC**) x 1
CR2032 Battery x 1
User Manual x 1

- **Specifications**

Model : BS801B_DemoV100
Keys : 1 KEY
Battery : CR2032 Lithium Battery
Power Consumption : 1.5μA (**Standby Mode**)
3.0μA (**Normal Mode**)
Size : 44mm (H) x 40mm (W) x 11mm (D)

Contact us

For more information about the touch Key IC, please visit our web site at <http://www.holtek.com.tw/touchkey>