1



Install Software

1. Download and install the CY3280 - SmartSense CapSense Auto-Tuning Kit installer package from http://www.cypress.com/go/CY3280-SmartSense.

2



Power CY3280-SmartSense Kit

1. Insert battery in the battery holder.
2. Keep the kit on a stable surface and touch the power button
3. Ensure power LED turns on.

3

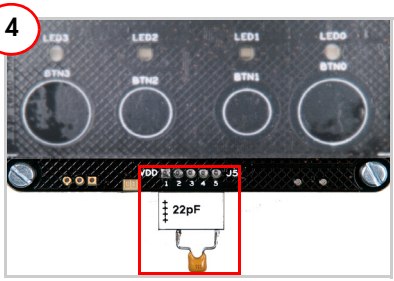


Touch Buttons

1. Touch any button; the respective LED turns on.
2. Touch more than one button simultaneously and observe that all touches are registered separately.

Note: A SmartSense example project is programmed with the kit, which implements LED toggle function when the associated button is touched.

4

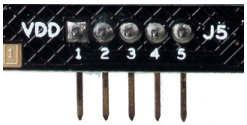


Evaluate SmartSense Autotuning

1. Increase parasitic capacitance of BTN2 by connecting external capacitor to J5 with mark facing up.
2. Touch the power button twice to toggle the power to the kit; then test BTN2.
3. BTN2 works up to 45 pF of parasitic capacitance.

Note: See the user guide for more details.

Connector Details





Conn J5:

Pin 1 – VDD
Pin 2 – GND
Pin 3 – XRES
Pin 4 – Button Sensor BTN1
Pin 5 – Button Sensor BTN2

Notes

- It is not recommended to connect power to J5 connector, when kit is powered from J2 connector or battery.
- BTN1 and BTN2 are connected to pin 4 and 5 of J5 connector for SmartSense evaluation; touching those pins may create false trigger.
- Connector J5 is used to program the CapSense controller as well as implement CapSense sensors; this is not recomended in a design.

Conn J1:

Pin 1 – P0[4]
Pin 2 – XRES
Pin 3 – P1[5]
Pin 4 – P1[7]
Pin 5, 6 – GND
Pin 7 – P2[3] (LED0)
Pin 8 – P2[5] (LED1)
Pin 9 – P0[1] (LED2)
Pin 10 – P0[7] (LED3)

Conn J2:

Pin 33 – P1[2]
Pin 34 – NC
Pin 35, 36 – GND
Pin 37, 38 – NC
Pin 39, 40 – GND
Pin 41 – VDD_Ext
Pin 42 – NC

Notes

- Demo CapSense controller powers 200 mV lesser than the power connected to J2 due to the 200 mV dropout across the series pass switch in the power section. Minimum recommended supply voltage through J2 connector is 2 V.
- If the kit is powered through J2, operating voltage will be less than external supply voltage.

For the latest information about this kit visit
www.cypress.com/go/CY3280-SmartSense

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