

## State Change Detection

### Description

This example uses a momentary push button to change the state of the LED. If the LED is High when the push button is pressed the LED goes from High to Low and vice versa. We will be using the code provided under examples on the Arduino IDE.

### Hardware

- Intel® Galileo
- 10k ohm Resistor
- Wires
- Breadboard
- Momentary push button
- 1 LED

### Instructions *(see Circuit for details)*

1. Place the momentary push button in the middle of the breadboard with the divider underneath.
2. Connect a wire from the 5V pin-out on the Galileo to power strip on the breadboard.
3. Connect a wire from the GND pin-out on the Galileo to Ground strip on the Breadboard.
4. Place the LED on the breadboard. *(notice the longer leg of the LED is positive and the shorter leg is negative)*
5. Connect the positive side of LED to pin-out 13 on the Galileo.
6. Connect the negative side of LED to ground strip on the breadboard.
7. Connect the left-bottom side of the momentary push button to positive strip on the breadboard.
8. Connect the right-bottom side of the momentary push button to one side of the resistor.
9. Connect a wire from the ground strip on breadboard to the other side of the resistor.
10. Connect a wire from the top-right side of the momentary push button to pin-out 2 on the Galileo.
11. Connect Power supply to the Galileo and USB to USB Client Port on the Galileo.
12. Open Arduino IDE under Tools → Board select Intel® Galileo
13. Under Tools → Serial Port select the Com # where the Galileo is connected to.
14. Under File → Examples → 02. Digital and select the “StateChangeDetection” example.
15. Upload to Galileo by clicking the upload button. 

### Circuit



