

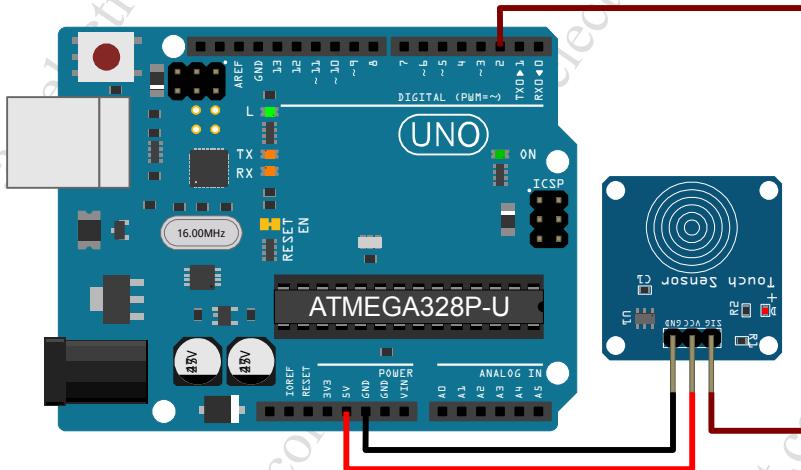
## Capacitive Touch Sensor Module

This module uses a "223B" capacitive sensor Integrated Circuit which senses variations in capacitance at the large circular pad at the bottom of the Printed Circuit Board.

Many modern devices such as smart phones, use capacitive sensing as it can be triggered by close proximity, unlike conventional touch switches which require actual physical contact. Capacitive sensors also function when there is a thin layer of non-metallic material between the sensor, and the finger. This makes them ideal for use where the sensor may be behind a glass or perspex panel to protect the internal electronics from adverse environmental conditions.

**Table 1: Capacitive Touch Sensor Module Pin Connections**

Device	Arduino	Wire	Description
GND	GND	■	Ground connection.
VCC	5V	■	5 Volts Direct Current positive supply for board circuitry.
SIG	D2	■	Digital output signal. D2: can be any digital pin.



The sketch below can be used to display the results to the Arduino Serial Monitor / Plotter.

```
int pCapacitiveDigital = 2;  
void setup() {  
    pinMode( pCapacitiveDigital, INPUT );  
    Serial.begin( 9600 );  
}  
void loop() {  
    Serial.println( digitalRead( pCapacitiveDigital ), DEC );  
}
```

### Module Specifications

PCB Dimensions ( H × W × D ): 24.4 × 23.8 × 1.6 millimetres [mm]  
Enclosing Dimensions ( H × W × D ): 28.6 × 23.8 × 7.2 mm  
Weight: 1.86 grams [g]  
Input Voltage: 5 VDC

### Module Performance

Current Draw: 3.0 millamps [mA] @ 5.01 VDC

## **Capacitive Touch Sensor Module...**

### **Module Mounting**

The module has  $4 \times 2.5$  mm diameter holes at each corner of the Printed Circuit Board. As the bare component leads protrude through the bottom of the PCB, suitable spacers and insulation must be used.

### **Module Projects**

Folder: \Modules\Interface\Capacitive\_Touch\_Sensor\

- **Capacitive\_Touch\_Sensor\_SM**: Displays the results to the Arduino Serial Monitor / Plotter.

## Capacitive Touch Sensor Module - Dimensions

