# Digital Capacitive Touch Sensor Module

This module uses a "223B" capacitive sensor **I**ntegrated **C**ircuit which senses variations in capacitance at the square region at the top of the **P**rinted **C**ircuit **B**oard marked with the "At" (@) symbol. When the capacitance rises above a preset level, the on-board red **L**ight **E**mitting **D**iode illuminates.

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: Digital Capacitive Touch Sensor Module Pin Connections

Device	Arduino	Wire	Description
+	5V	🟥	5 **V**olts **D**irect **C**urrent positive supply for board circuitry.
S	D2	🟥	Signal output from capacitive circuitry.
−	GND	⬛	Ground connection.

D2: can be any digital pin.
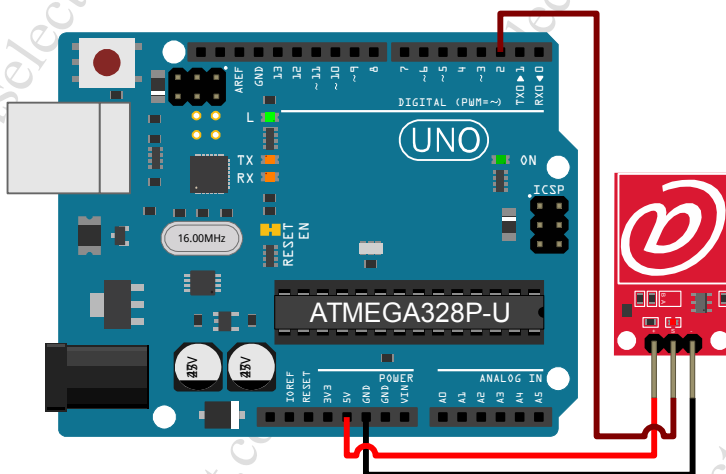
The sketch below can be used to display the results to the Arduino Serial Monitor / Plotter.

```
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):	24.3 × 15.6 × 1.6 millimetres [mm]
Enclosing Dimensions (H × W × D):	29.7 × 15.6 × 7.2 mm
Weight:	1.48 grams [g]
Input Voltage:	5 **VDC**

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Module Performance

Current Draw (not triggered):	< 0.03 milliamps [mA] @ 5.07 **VDC**
Current Draw (triggered):	2.3 mA @ 5.07 **VDC**
Output (not triggered):	0 **VDC**
Output (triggered):	4.2 **VDC**

Projects

Folder: **\Modules\Interface\Digital_Capacitive_Touch_Sensor**

• **Digital_Capacitive_Touch_Sensor_SM**: Displays the results to the Arduino Serial Monitor / Plotter.

Digital Capacitive Touch Sensor Module - Dimensions