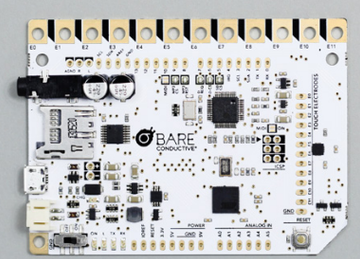
Touch Board vs Pi Cap
What is the difference?

TOUCH BOARD



Arduino-Compatible

- Plug and play out of the box
- No computer needed to start
- Programmable via Arduino IDE
- Uses capacitive sensing
- Can detect touch and proximity
- On board MP3 playback from Micro SD card
- Installer works for every operating system

OUT OF THE BOX

Straight out of the box, the Touch Board acts a touch-triggered MP3 player. It doesn't need to be connected to a computer to play sounds, when it arrives there is already an audio guide on the SD card that plays when you touch the electrodes. You don't need an internet connection or computer to get started.

HOW IT WORKS

The Touch Board uses capacitive sensing. This means you don't have to actually touch a sensor to send a signal to the board as it is detecting the change in the electrical field rather than connecting a circuit. The Touch Board requires no second connection this means you can use one hand to interact with the sensor while the other remains completely free! You can also trigger the Touch Board through other resistive materials such as glass and wood.

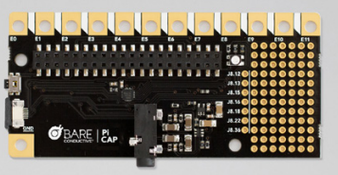
CODING

The Touch Board is compatible with the Arduino platform and you can program the chip on the board to do pretty much anything you want, whether it's touch, proximity, HID (mouse and keyboard), MIDI and much more. The Touch Board has been designed to work with a range of shields so you can add extra functions. Check out the Touch Board Shield Guide to learn more.

POWER

You can use a USB cable to power the Touch Board, or just plug in a LiPo battery. Your Touch Board can stand completely alone, or concealed in a project. The LiPo battery will charge when the board is plugged in via USB.

Pi CAP



Raspberry Pi add-on

- + Raspberry Pi add-on (A+, B+, Zero or later)
- + Simple Raspbian package setup
- + Programmable via C++ and Python
- + Uses capacitive sensing
- + Can detect touch and proximity
- + High quality audio output
- + Includes a push-button, RGB LED, prototyping area, GPIO breakout and 3.5mm audio line out

OUT OF THE BOX

Our tutorials take you through the complete process of installing the Raspbian operating system, attaching the Pi Cap to the Raspberry Pi, installing our software examples and guiding you through an introduction of what you can do.

HOW IT WORKS

The Pi Cap benefits from the same capacitive sensing platform that the Touch Board uses. This means you can use the sensors to detect touch, distance or proximity, and you can access all the same data on the Raspberry Pi using the Pi Cap.

CODING

The Pi Cap comes with example code and libraries for C++ and Python. Similarly to the Touch Board, you can use the Pi Cap to trigger MP3s, but unlike the Touch Board you can trigger multiple sounds at the same time (polyphonically). You can also take advantage of the more sophisticated features that the Raspberry Pi offers — internet connectivity, video playback, OSC, Bluetooth — and interface with the wealth of software already written for the Pi.

POWER

The Pi Cap is powered by the Raspberry Pi that it is attached to, which is in turn powered via a USB power supply. You'll need a supply capable of at least 1.5A (although we recommend a 2.5A supply) — the Pi is a lot more power hungry than the Touch Board. If you need portable power, a USB power pack is the best solution.