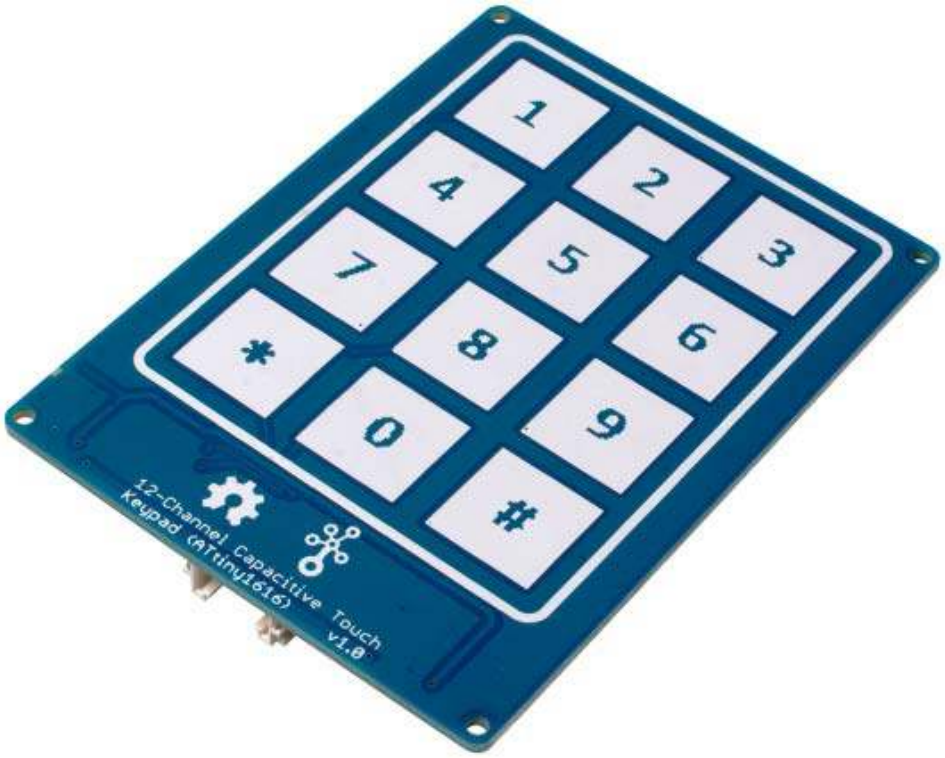



# Grove - 12-Channel Capacitive Touch Keypad (ATtiny1616)

**SKU** 101020636

The Grove 12 button Capacitive Touch Keypad is built around the ATtiny1616, an AVR® 8-bit processor running at up to 16 MHz. ATtiny1616 is a low-power, high-performance chip integrated QTouch® peripheral touch controller which supports capacitive touch interfaces with proximity sensing and driven shield. With this module, you can easily create an arduino password keypad or a DIY phone keypad.

We made this keypad into a 3x4 form, just like the layout of a mobile phone keyboard. The traditional keypad requires 3 vertical lines and 4 horizontal lines to scan, which will occupy 7 I/O pins of the microcontroller. With the help of ATtiny1616 and Grove connector, only RX and TX two pins are enough for Grove - 12-Channel Capacitive Touch Keypad. You can easily use this module with a microcontroller with a hardware UART interface, or you can use the software UART to read the button input with two normal I/O pins.

All in all, the Grove 12 button Capacitive Touch Keypad is an easy-to-use module that requires very little code, especially when you use it with Grove compatible mainboards, no soldering, just plug and play.

**Note**

We've Released the Grove Selection Guide and hope to help you find the Grove suit you best.

## Features

- Low Power ATtiny1616 controller
- 3.3V / 5V compatible
- Capacitive touch, high sensitivity
- 12 button keypad
- 4 pin Grove UART connector
- On-board LED indicator

## Applications

- Phone keypad
- Password access
- Extended input interface

## Hardware Overview

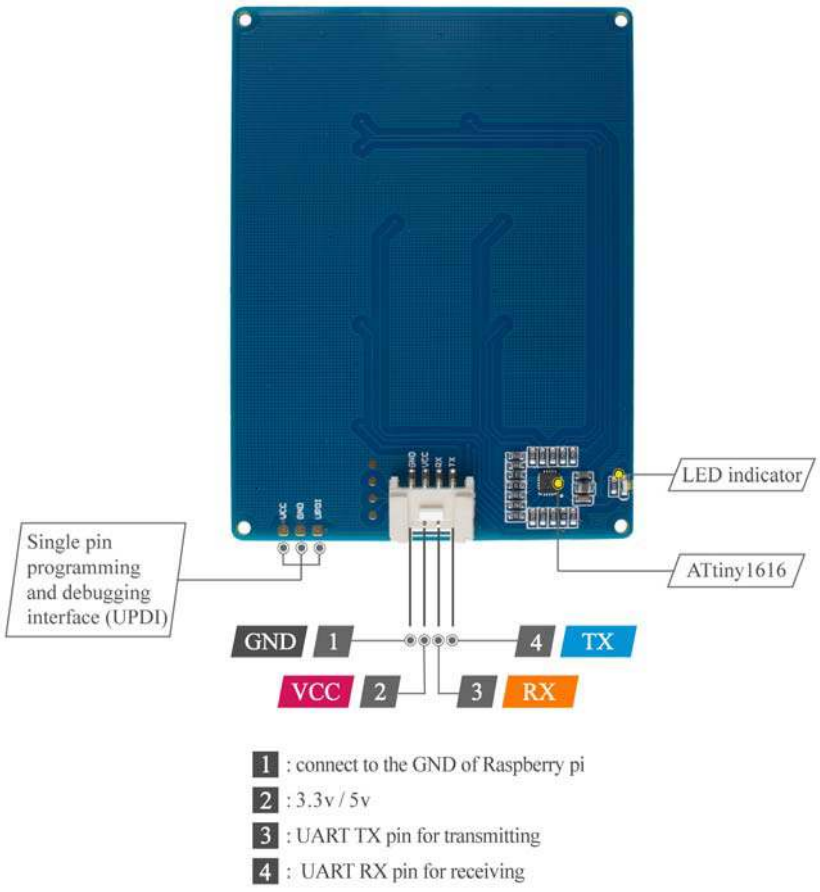
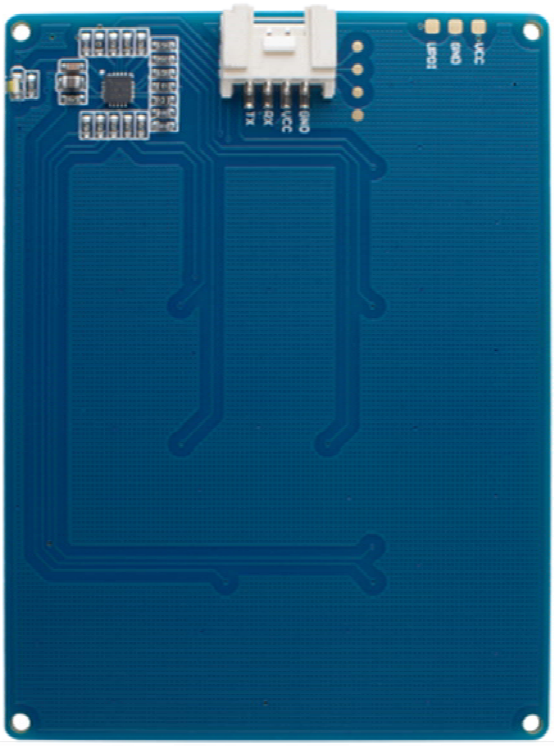
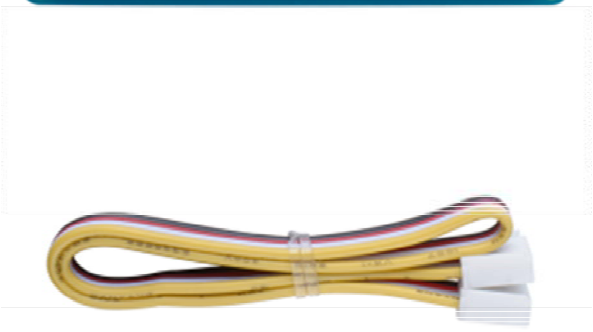


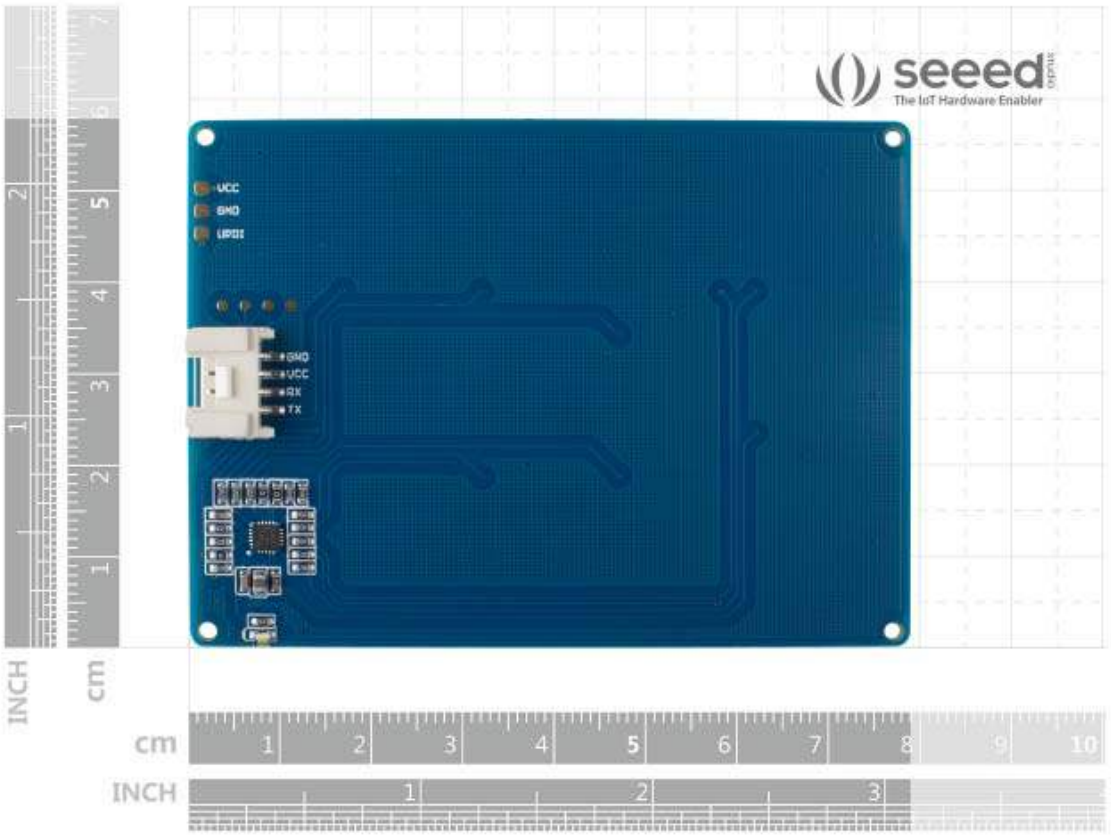

**Figure 1.** *hardware overview*

## ECCN/HTS

| | |
|---|---|
| ECCN | EAR99 |
| HSCODE | 9031900090 |
| UPC | |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The IoT Hardware Enabler
VCC
GND
GND
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RX
TX
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