Pi 3 click shield

PID: MIKROE-2756

Pi 3 click shield

By adding two mikroBUS™ sockets to your Raspberry Pi 3, the Pi 3 click shield allows you to experiment with hundreds of click boards™ from our ever expanding range. Wi-Fi, Lora, Bluetooth, GSM, GPS, RFID, OLED, speech recognition, environmental sensors, movement sensors, biosensors, LEDs, relays, — you name it, we got it!

The Pi 3 click shield is compatible with Raspberry Pi 3 model B, 2 B, 1 A+ and B+. 
Make your Raspberry Pi® compatible with click boards™

By adding two mikroBUS™ sockets to your Raspberry Pi 3, the **Pi 3 click shield** allows you to experiment with **hundreds of click boards™** from our ever expanding range.

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The shield has an onboard ADC which enables the measuring of the analog levels. Since the Raspberry Pi® doesn't have an analog pin on the expansion connector, by adding an ADC we've enabled the usage of any click board™ from our offer.

ADC onboard is **MCP3204** 12-bit Analog-to-Digital Converter from Microchip. It also has a switch selector which allows the pin on the mikroBUS™ to be directed to GPIO or to the ADC. Because of the reference voltage which is 4.096V, the ADC works on 5V, and since the Raspberry Pi® GPIO voltage level is 3.3V, voltage translator is needed. That's why we've included **TXB0106** voltage translator from Texas Instruments.

This shield has two mikroBUS™ sockets so that you can add hundreds click boards™ from our ever expanding range.
The package includes single 2x20 female sockets and 2x12mm distance with 2 screws.
Software examples for click boards™ are available on Libstock, giving you a repository of working code - a great starting point for your own projects.
Pi 3 Model B pinout

Pi 3 Model B has the same layout as the Pi 1 Model A+, Pi 1 B+ and Pi 2 Model B.

Picture on the right shows Pi 3 click shield connected to the Raspberry Pi® 3 model B, picture on the left shows the connected shield along with two click boards™: Ozone 2 and GNSS 5 click.
## SPECIFICATION

<table>
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<tr>
<th>Type</th>
<th>Shield</th>
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<tr>
<td>Applications</td>
<td>Pi 3 click shield allows you to use click boards on your Raspberry Pi®</td>
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<tr>
<td>On-board modules</td>
<td>Two mikroBUS™ sockets, MCP3204 12-bit Analog-to-Digital converter (ADC), 4.096V reference voltage</td>
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<td>Key Features</td>
<td>GND Oscilloscope probe pin. Four mounting holes.</td>
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<td>Input Voltage</td>
<td>3.3V or 5V</td>
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<td>Compatibility</td>
<td>Raspberry Pi</td>
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