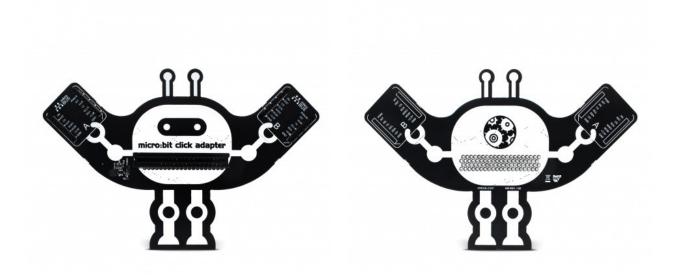


MIKROELEKTRONIKA D.O.O, Batajnički drum 23, 11000 Belgrade, Serbia VAT: SR105917343 Registration No. 20490918 Phone: + 381 11 78 57 600 Fax: + 381 11 63 09 644 E-mail: office@mikroe.com

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# micro:bit click adapter



PID: MIKROE-2994

The BBC micro:bit is a credit card sized microcontroller development system, with a very simple and user-friendly visual programming interface, designed to introduce the kids to the world of embedded electronics. The micro:bit project is managed by the micro:bit Educational Foundation. This foundation is a non-profit organization with a very noble goal: giving children around the world a chance to get creative with the technology. You can find more information about the micro:bit project on the official web page. However, this little development system can be interesting even for more experienced developers, because in its heart, there is a powerful nRF51822 SoC with a 16 MHz ARM Cortex-M0 microcontroller (MCU) with 256 KB Flash and 16 KB RAM, beating. By inserting this ingeniously designed symmetrical development board into the micro:bit Click adapter, the world of possibilities grows exponentially: more than 400 different sensors, displays, drivers, radios, buttons, switches, faders, encoders, relays, converters, and more - neatly packed into the standardized Click board™ form factor, will be just under your fingertips.

### **Overview**

The BBC micro:bit is a credit card sized microcontroller development system, with a very simple and user-friendly visual programming interface, designed to introduce the kids to the world of embedded electronics. The micro:bit project is managed by the micro:bit Educational Foundation. This foundation is a non-profit organization with a very noble goal: giving children around the world a chance to get creative with the technology. You can find more information about the micro:bit project on the official web page.

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Committed to excellency, we are dedicated to helping engineers bring the project development up to speed and achieve outstanding results.





ISO 27001: 2013 certification of informational security management system. ISO 14001: 2015 certification of environmental management system. OHSAS 18001: 2008 certification of occupational health and safety management system.



ISO 9001: 2015 certification of quality management system (QMS).



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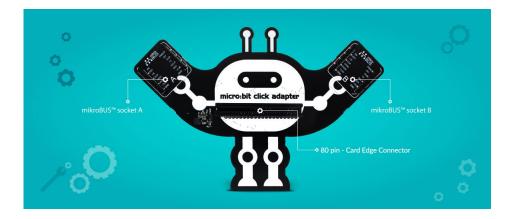
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Once installed onto the micro:bit Click adapter, the BBC micro:bit can really open the doors to the world of embedded electronics. For those who are more curious, who want to know more: take a peek at the device's datasheet, see which I2C slave address is required, which register turns on that BLUE channel of the RGB driver 3 click and send in the data. Put the I2C, SPI and Serial communication blocks of the micro:bit IDE to a good use!

**Note**: BBC's micro:bit is not included in the package.

CLICK BOARD COMBINATIONS

### Main features



The **micro:bit Click adapter** comes comes equipped with two proprietary <u>mikroBUS™</u> sockets, allowing all the <u>Click board™</u> devices to be interfaced with the micro:bit with no efforts at all. It is enough to place the small standardized add-on board of your choice on the top of the mikroBUS™ socket - and click it in. That is why this small add-on board is called Click

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board<sup>™</sup> - it just clicks!

The mikroBUS<sup>™</sup> standard is founded and maintained by MikroElektronika company, allowing all the various Click boards<sup>™</sup> to perfectly fit in, without any compatibility issues. Besides the 3.3V available from the micro:bit itself, the micro:bit Click adapter offers an additional 5V power supply (switchable through the onboard switch), required by some of the Click boards<sup>™</sup>. This allows interfacing with an extended range of different devices. More information about the mikroBUS<sup>™</sup> standard can be found on the official  $mikroBUS^{™}$  page.

## **Power your inventions**



The **micro:bit Click adapter** is powered from the micro:bit itself. An 80pin edge connector allows easy installation to the micro:bit board. Due to the micro:bit symmetrical design, there is no wrong way of connecting. It can be plugged into the connector both ways, keeping it simple.

# mikroBUS™ pinout

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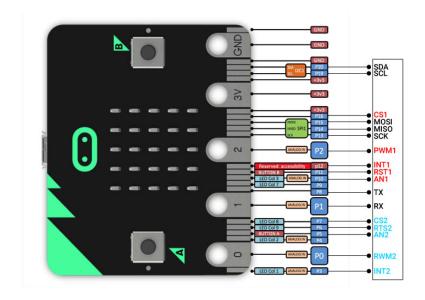


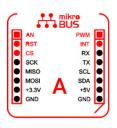


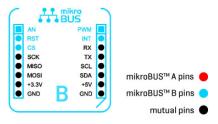
Time-saving embedded tools

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## **Specifications**

Туре	Shield
Applications	Adding Click board functionalities to the micro:bit
On-board modules	Two mikroBUS™ sockets, 80pin edge connector for the micro:bit board
Interface	Analog,I2C,PWM,SPI,UART
Compatibility	micro:bit,mikroBUS™
Input Voltage	3.3V,5V

## **Resources**

<u>mikroBUS™</u>

Click board™ Catalog

Click Boards™

## **Downloads**

micro:bit click adapter schematic

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