# mail

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# micro:bit click adapter

PID:MIKROE-2994 Weight:45 g

# Make Learning fun – create embedded toys

We designed the micro:bit adapter to be eye-catching for your kids (or the kid inside you.) With two mikroBUS<sup>™</sup> sockets in each hand this awesome gadget will make sure you learn and have fun.

#### **Overview**

The BBC **micro:bit** is a credit card sized microcontroller development system, with a very simple and userfriendly 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<sup>™</sup> form factor, will be just under your fingertips.

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.



#### **Main features**



The micro:bit Click adapter comes comes equipped with two proprietary mikroBUS<sup>™</sup> sockets, allowing all the Click board<sup>™</sup> 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<sup>™</sup> socket - and click it in. That is why this small add-on board is called Click 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<sup>™</sup> 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







## **Specification Table**

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

#### Gallery



### **Downloads**

mikroBUS<sup>™</sup> Standard specification micro:bit click adapter schematic

https://www.mikroe.com/microbit-click-adapter 5-11-18