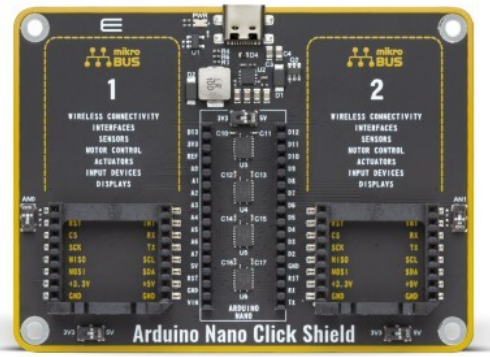
MIKROELEKTRONIKA D.O.O, Batajnički drum 23, 11000 Belgrade, Serbia
VAT: SR105917343 Registration No. 20490918
Phone: + 381 11 78 57 600 Fax: + 381 11 63 09 644 E-mail: office@mikroe.com
www.mikroe.com

Arduino Nano Click Shield



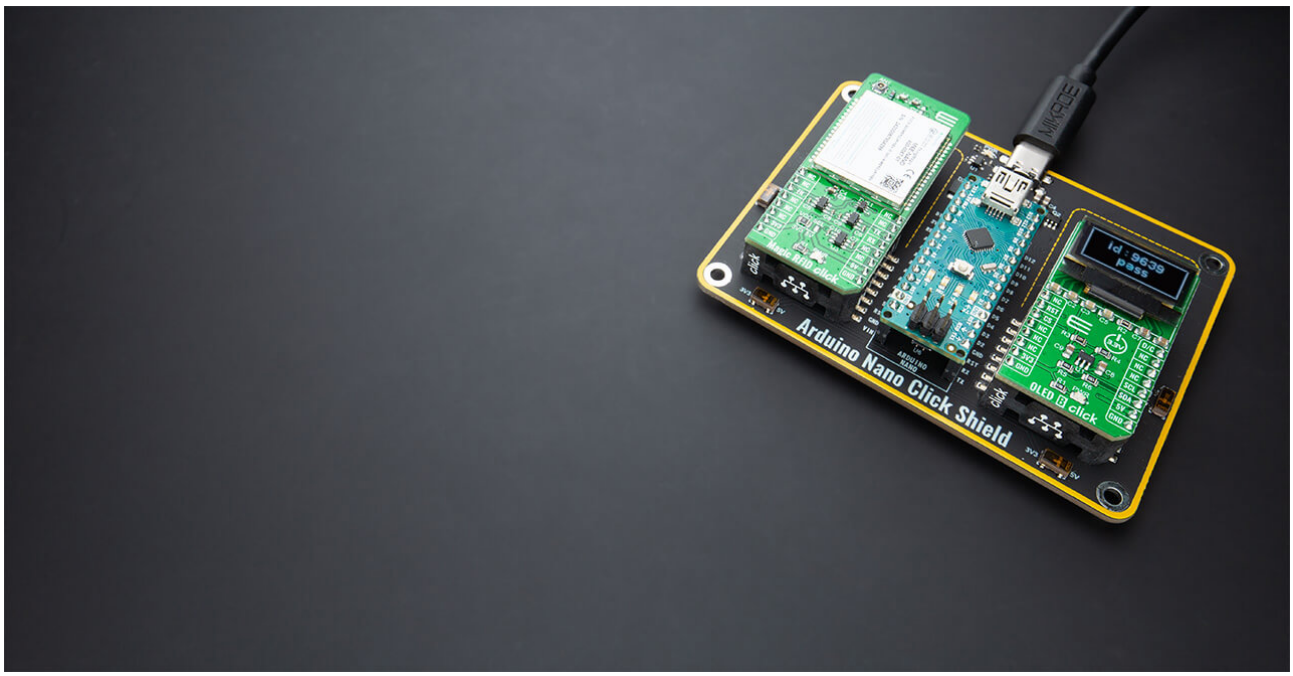
PID: MIKROE-4443

Arduino Nano Click Shield

MIKROE

Time-saving embedded tools

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
www.mikroe.com



Mikroe produces entire development toolchains for all major microcontroller architectures.
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).

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
www.mikroe.com

Overview

Arduino Nano Click Shield is the perfect way to expand the functionalities of your Arduino Nano board. The Arduino Nano Click Shield provides two mikroBUS™ sockets to add any functionality from our ever-growing range of Click boards™. We are fully stocked with everything, from sensors and WiFi transceivers to motor control and audio amplifiers.

The Arduino Nano is a small, complete, and breadboard-friendly board formfactor. When it comes to a host controller it can be found in various "flavors", such as based on the high-performance 8-bit AVR® microcontroller (Arduino Nano and Arduino Nano Every) or a low power 32-bit ARM® Cortex® microcontroller (Arduino Nano 33 IoT and Arduino Nano 33 BLE), that brings better specifications to anyone's project at a low cost. Compared to the Arduino Uno’s familiar form factor, Nano boards are much smaller. Some of the boards come with onboard connectivity modules ranging from Wi-Fi to GSM, making them the right solution for your next IoT project. It's supported by the same well-known Arduino IDE and works with a USB cable (Mini or Micro-B type depending on the used board) instead of a standard one.

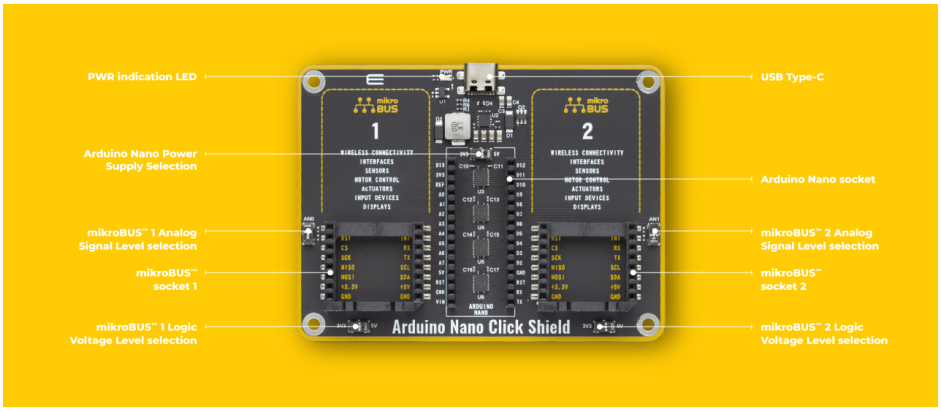
This development platform provides users with an extremely easy and common way to combine the Arduino Nano footprint compatible development boards with their favorite Click boards™ in their upcoming projects.

Note: Arduino Nano board is not included in the package.

CLICK BOARD
COMBINATIONS

Main features

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
www.mikroe.com



Arduino Nano Click Shield comes equipped with two proprietary mikroBUS™ sockets, allowing all the Click board™ devices to be interfaced with the Arduino Nano boards with no effort at all. This way, Mikroe allows its users to add any functionality from our ever-growing range of Click boards™, such as WiFi, GSM, GPS, Bluetooth, ZigBee, environmental sensors, LEDs, speech recognition, motor control, movement sensors, and many more. More than 968 Click boards™, which can be stacked and integrated simply, and conveniently, are at your disposal.

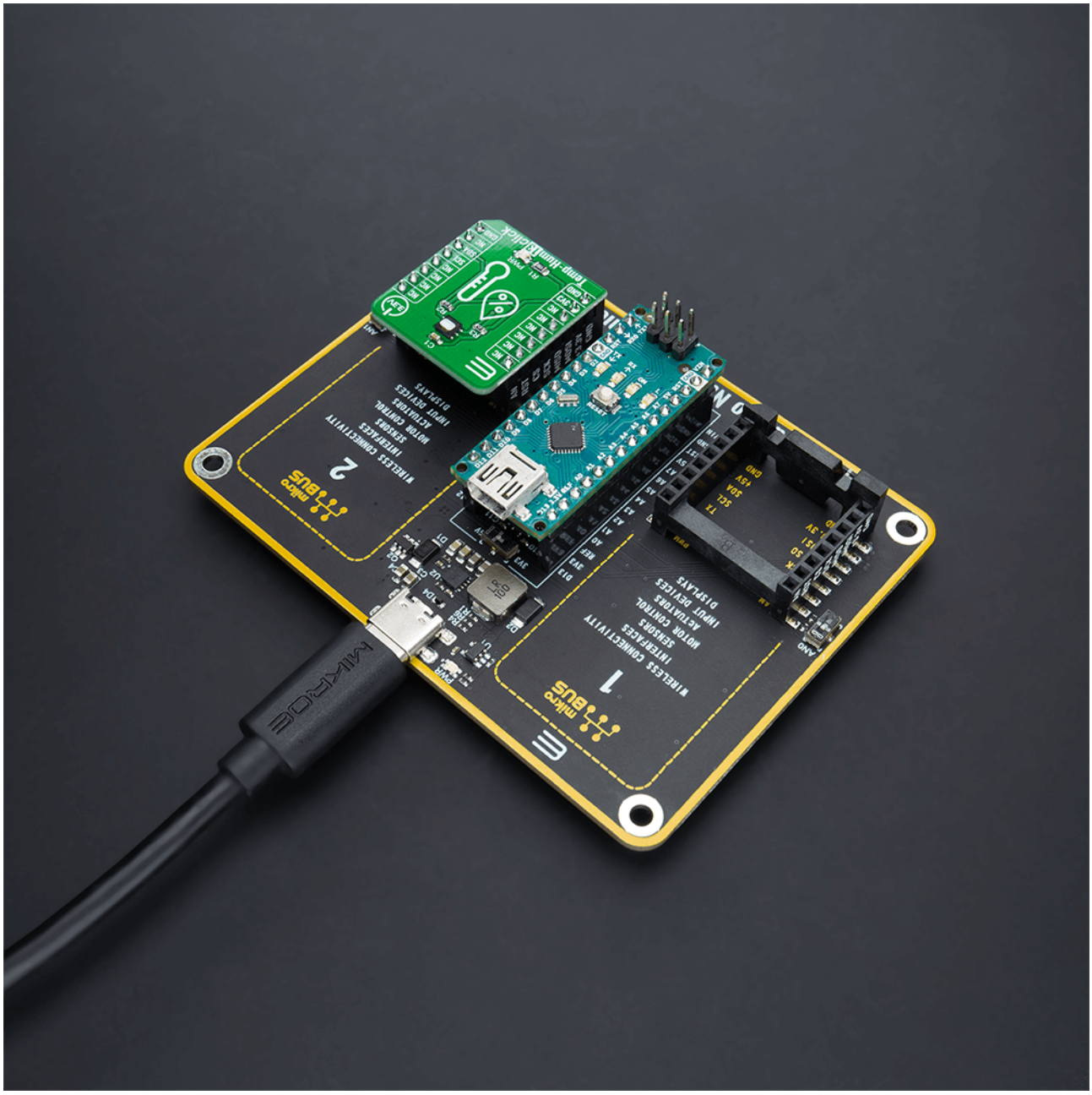
The Arduino Nano can be programmed with the Arduino Software (IDE), an Integrated Development Environment common to all Arduino boards, and runs both online and offline. The Arduino Nano Family of development boards comes pre-burned with a bootloader that allows you to upload new code to it without an external hardware programmer. The Arduino software includes a serial monitor that allows sending simple textual data to and from the Arduino board, with onboard RX and TX LEDs that indicates when data is transmitted. In addition, the Nano boards also supports I2C and SPI communication and includes a Wire library to simplify the use of the I2C bus. For more information on how to get started with the Arduino Software, visit the Getting Started page.

This Click Shield also has several switches that perform functions such as selection of the logic levels of analog signals on mikroBUS™ sockets, as well as a selection of logic voltage levels of the mikroBUS™ sockets themselves. Besides, the user is offered the option of selecting the supply voltage of the Arduino Nano board itself with the possibility of using any Click board™ with the help of existing bidirectional level-shifting voltage translators, regardless of whether the Click board™ operates at 3.3V or 5V logic voltage level.

Once you plug development board compatible with the Arduino Nano footprint into the Arduino Nano Click Shield, it will allow you access to hundreds of Click boards™ working with 3.3V or 5V logic voltage level. For checking which Click boards™ are compatible with Arduino Nano Family of development boards, please open our Click Shop filter. Our Click boards™ are equipped with a library that contains functions and example codes for Mikroe compilers available on LibStock, which can be used, as a reference, for further development.

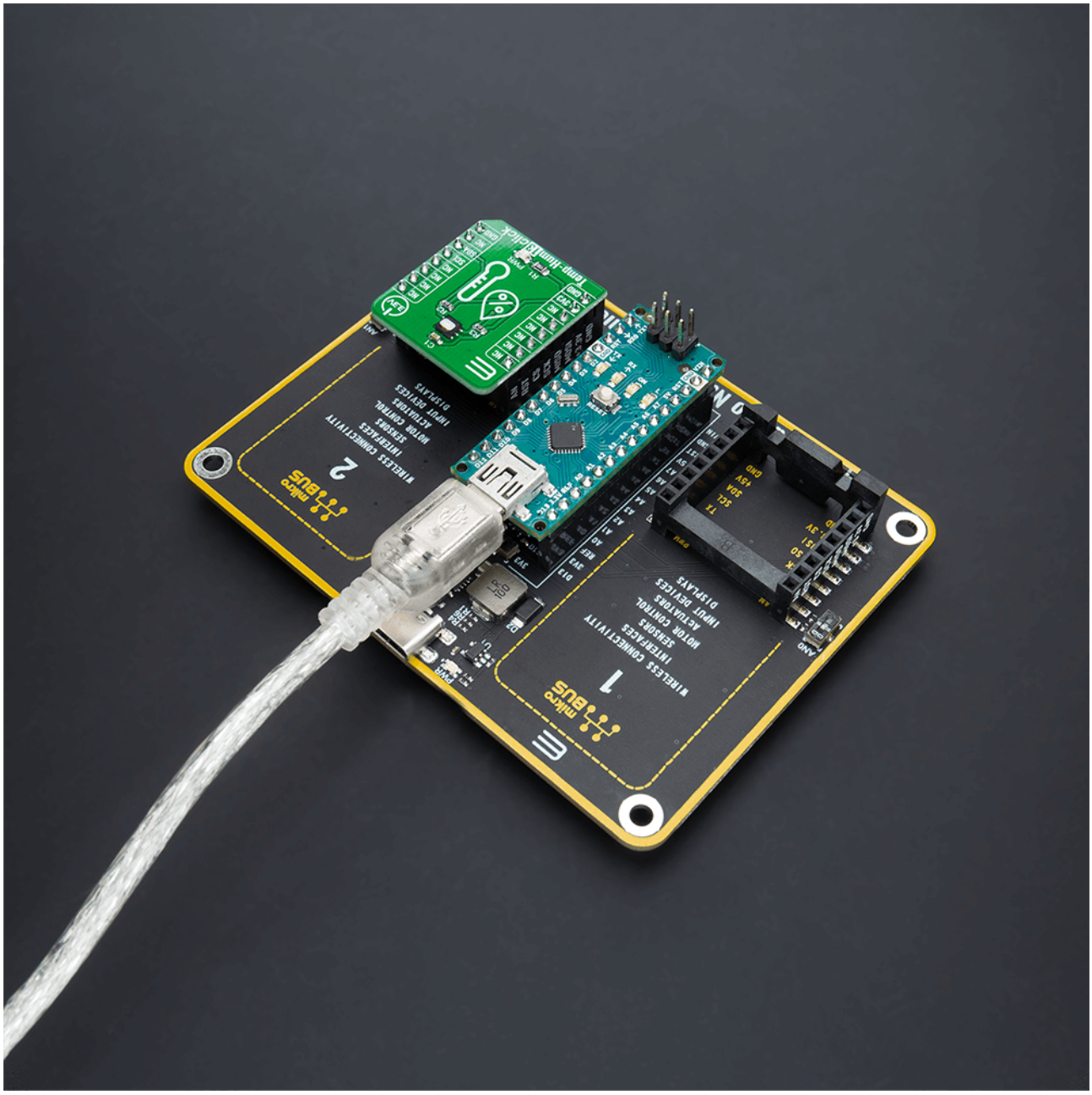
Power your inventions

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
www.mikroe.com



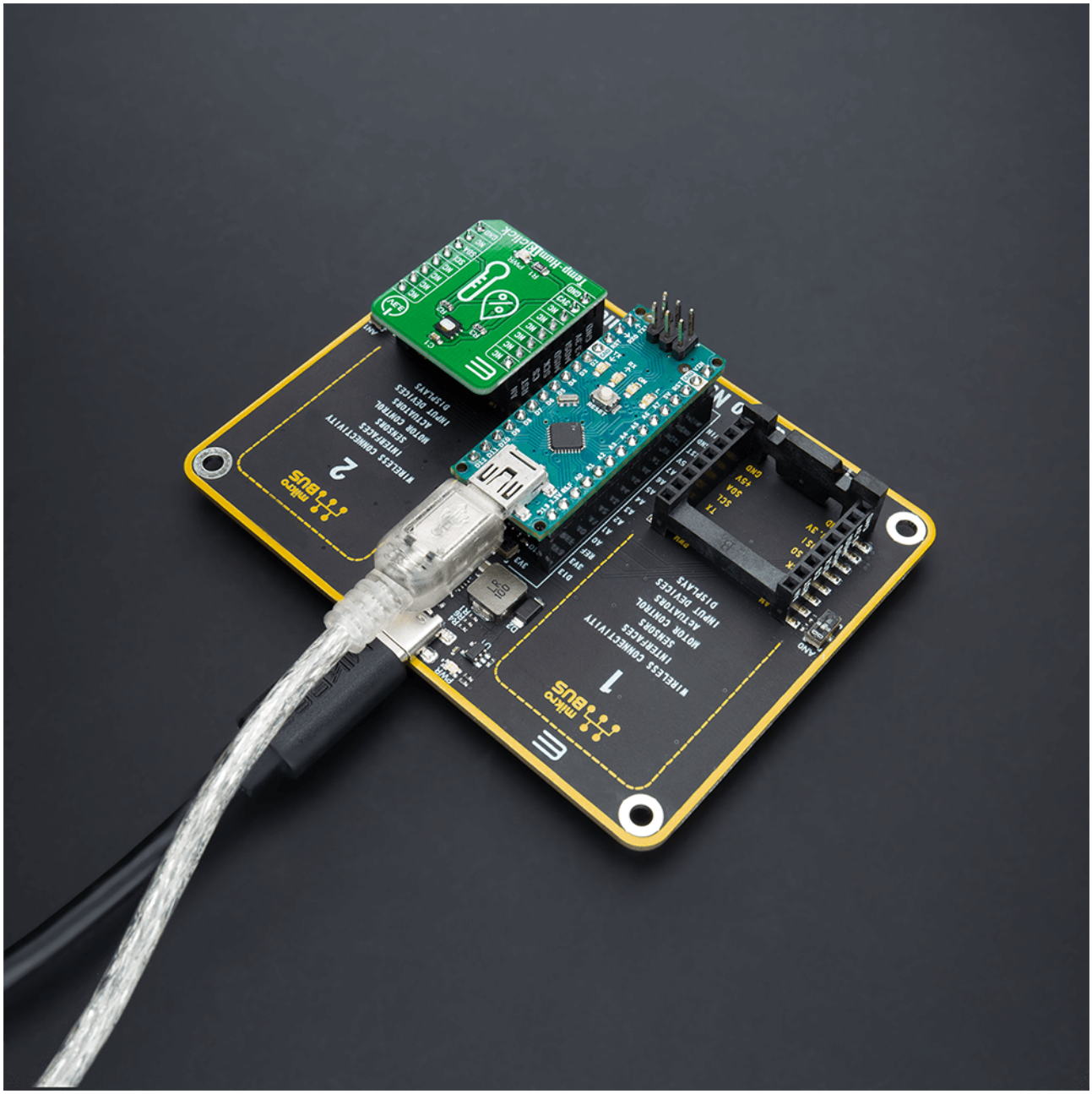
When the USB type C connector is connected to the Shield, the PWR diode will glow Blue, and at this setup, the connected Arduino Nano baseboard and two mikroBUS™ sockets will be powered from it.

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
www.mikroe.com



When the USB mini connector is connected to the system board, the PWR diode will glow Green, and at this setup, the Arduino Nano baseboard itself will be powered and will provide power to the Shield including two mikroBUS™ sockets.

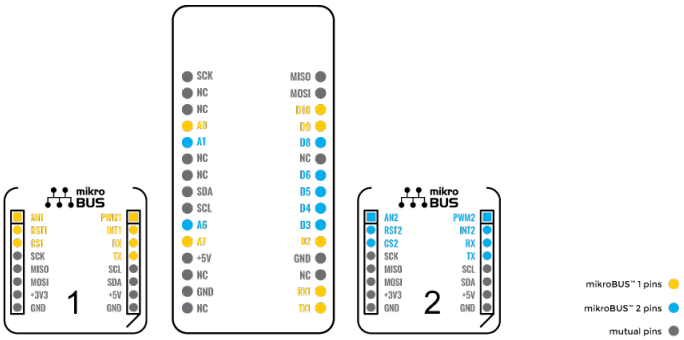
MIKROELEKTRONIKA D.O.O, Batajnički drum 23, 11000 Belgrade, Serbia
VAT: SR105917343 Registration No. 20490918
Phone: + 381 11 78 57 600 Fax: + 381 11 63 09 644 E-mail: office@mikroe.com
www.mikroe.com



When the USB type C connector is connected to the Shield, and the USB mini connector is connected to the system board, the PWR diode will glow Cyan, and at this setup, the mikroBUS™ sockets are powered from the Type C connector. The system board is unloaded from delivering power to them and is powered from its source (USB mini), over which you can also upload the program to your board.

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
www.mikroe.com

ARDUINO NANO TO mikroBUS™ PINOUT



Specifications

Type	Adapter,Shield
Applications	Arduino Nano Click Shield allows the combination of any development boards compatible with Arduino Nano pinout with Click boards™.
Key Features	Two mikroBUS™ sockets, connector for connecting compatible Arduino Nano board, four TXS0108E level-shifting voltage translators, power part for converting 5V USB to the 3.3V
Interface	Analog,GPIO,I2C,PWM,SPI,UART
Compatibility	Arduino,mikroBUS™
Input Voltage	3.3V or 5V,External

Resources

mikroBUS™

mikroSDK

Click board™ Catalog

Click boards™

Downloads

Arduino Nano Click Shield 2D and 3D files

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
www.mikroe.com

Arduino Nano Click Shield schematic