## 7-SEG RGB click

PID: MIKROE-2734
7-SEG RGB click carries a full color single 7 segment digit display. The click is designed to run on either 3.3 V or 5 V power supply. It communicates with the target microcontroller over the CS, and PWM pin on the mikroBUS ${ }^{\text {TM }}$ line.

The click can be connected in a chain, in order to display a larger number of characters. Unlike with conventional 7 segment displays, you will be able to use multiple colors on the display.


## Display features



Each segment has R, G, B LEDs that can be adjusted in 255 steps and therefore $16,581,375$ color combinations are available for each segment of the digit on the display.

Also, the ability to control the brightness of all the LED's is driven at 255 steps. It should be noted that the brightness values above 80 should rarely be used.

## Specifications

| Type | LED Segment |
| :--- | :--- |
| Applications | Displaying digits and letters on a seven segment in full color |
| Brightness | Adjustable from 0 to 255 steps |
| On-board modules | RGBdigit full color single 7 Segment digit display |
| Key Features | Multi-colored display |
| Interface | PWM |
| Input Voltage | 3.3 V or 5 V |
| Click board size | L (57.15 $\times 25.4$ mm) |

## Pinout diagram

This table shows how the pinout on 7-SEG RGB click corresponds to the pinout on the mikroBUS ${ }^{\text {TM }}$ socket (the latter shown in the two middle columns).

| Notes | Pin | ค९ mikro" |  |  |  | Pin | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NC | 1 | AN | PWM | 16 | PWM | Data input |
|  | NC | 2 | RST | INT | 15 | NC |  |
| Write enable (active low) | CS | 3 | CS | TX | 14 | NC |  |
|  | NC | 4 | SCK | RX | 13 | NC |  |
|  | NC | 5 | MISO | SCL | 12 | NC |  |
|  | NC | 6 | MOSI | SDA | 11 | NC |  |
| Power supply | +3.3V | 7 | 3.3 V | 5V | 10 | $+5 \mathrm{~V}$ | Power supply |
| Ground | GND | 8 | GND | GND | 9 | GND | Ground |

## Jumpers and settings

| Designator | Name | Default <br> Position | Default <br> Option | Description |
| :--- | :---: | :---: | :---: | :---: |
| JP1 | Logic level | Left | 3.3 V | Data in level Voltage Selection <br> $3 \mathrm{~V} 3 / 5 \mathrm{~V}$, left position 3V3, right <br> position 5V |

