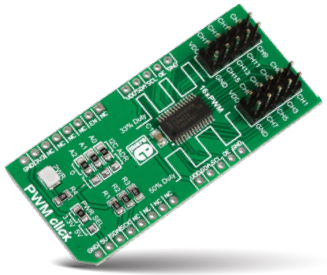
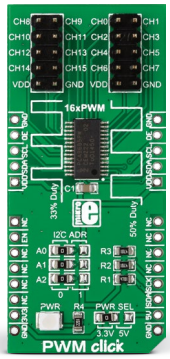
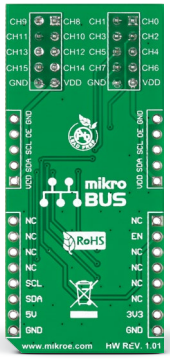


PWM click





1. Introduction

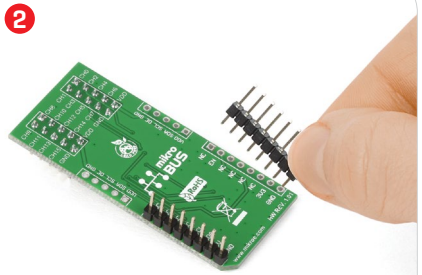
PWM click is a simple solution for controlling **16 PWM outputs** through a single I²C interface. The click board™ carries the **PCA9685PW IC**. In addition to mikroBUS™ I²C pins (SCL, SDA), the board also uses a LOW Output Enable Input pin (OE), which is in place of the default mikroBUS™ RST pin. *PWM click* is designed to use either a 3.3V or 5V power supply.

2. Soldering the headers

Before using your click board™, make sure to solder 1x8 male headers to both left and right side of the board. Two 1x8 male headers are included with the board in the package.

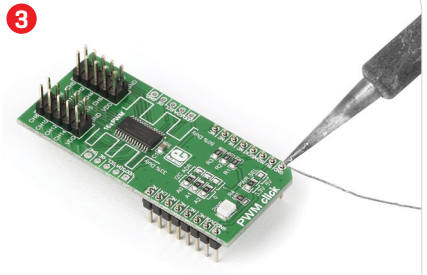
1

2

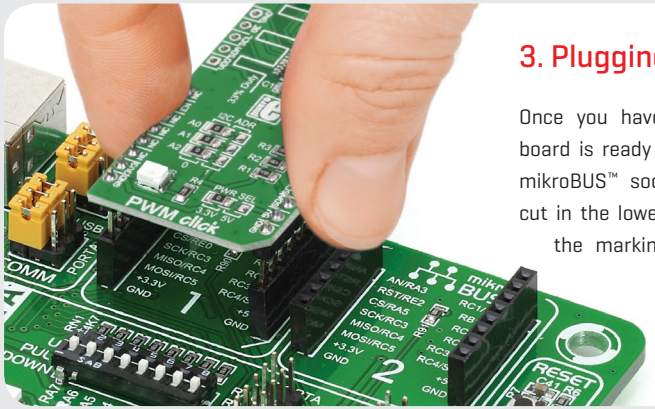


Turn the board upside down so that the bottom side is facing you upwards. Place shorter pins of the header into the appropriate soldering pads.

3

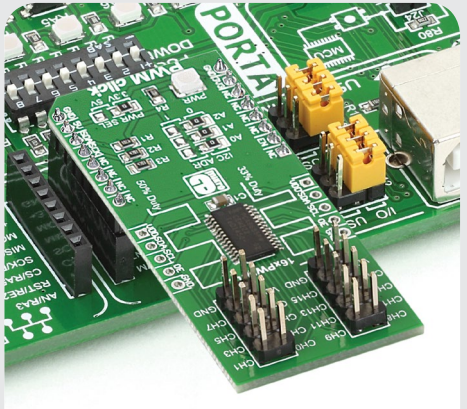


Turn the board upward again. Make sure to align the headers so that they are perpendicular to the board, then solder the pins carefully.



3. Plugging the board in

Once you have soldered the headers your board is ready to be placed into the desired mikroBUS™ socket. Make sure to align the cut in the lower-right part of the board with the markings on the silkscreen at the mikroBUS™ socket. If all the pins are aligned correctly, push the board all the way into the socket.



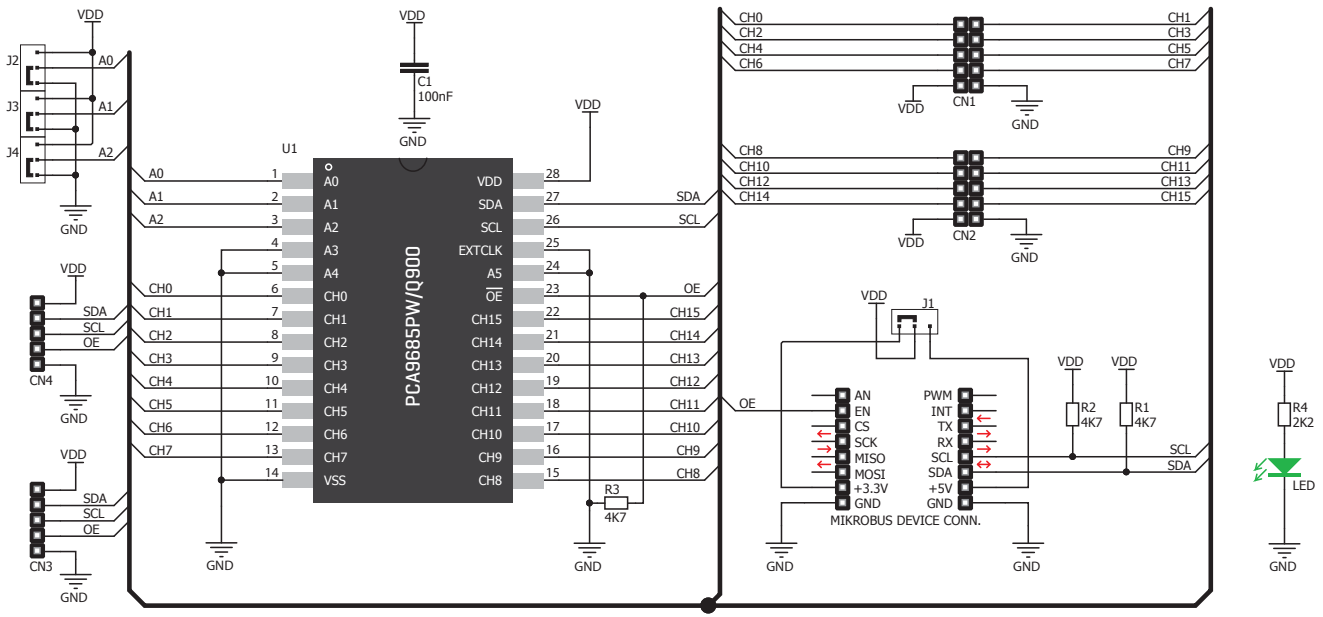
4. Essential features

PWM click can be used to control anything from a LED strip, set of servo motors, to a complex robot with a multitude of moving parts. The board has an additional set of pins that allow you to connect up to seven PWM clicks together (using three jumpers to specify a different I²C address for each one). This way, you can get a total of 112 PWM outputs on a single I²C line!

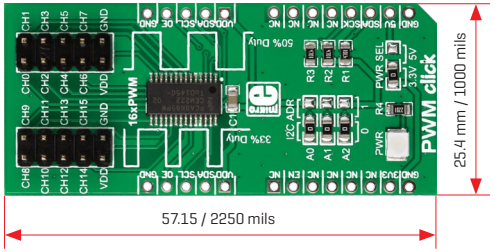
click
BOARD
www.mikroe.com

PWM click manual
ver 1.01
0100000078563

5. Schematic



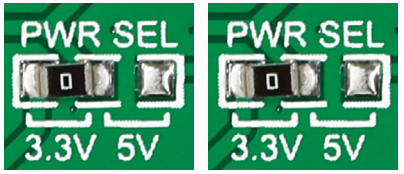
6. Dimensions



	mm	mils
LENGTH	57.15	2250
WIDTH	25.4	1000
HEIGHT*	3.5	138

* without headers

7. SMD jumper



PWM click has a PWR SEL jumper (zero ohm resistor) that lets you switch the board form 3.3V to 5V power supply.

8. Code examples

Once you have done all the necessary preparations, it's time to get your click™ board up and running. We have provided examples for mikroC™, mikroBasic™ and mikroPascal™ compilers on our **Libstock** website. Just download them and you are ready to start.

LIBSTOCK.com

9. Support

MikroElektronika offers **free tech support (www.mikroe.com/support)** until the end of the product's lifetime, so if something goes wrong, we're ready and willing to help!

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10. Disclaimer

MikroElektronika assumes no responsibility or liability for any errors or inaccuracies that may appear in the present document. Specification and information contained in the present schematic are subject to change at any time without notice.