

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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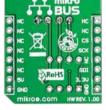




DIGIPOT click™

1. Introduction





Front and back side appearance of the DIGIPOT click Board

DIGIPOT Click is an accessory board in **mikroBus**TM form factor. It features **MCP4161** - a single-channel digital potentiometer with 8-bit resolution (256 wiper steps) and industry-standard SPI serial interface. The resistance value of the digital potentiometer goes up to $10k\Omega$. It features outstanding AC/DC characteristics and low power consumption. It can be used in audio equipment, servo-motor control, battery charging and control, LCD contrast control, programmable filters etc.

2. Soldering the headers

Before using your click board, make sure to solder the provided 1x8 male headers to both sides of the board. Two 1x8 male headers are included with the board in the package.





Turn the board upside down, so that bottom side is facing you upwards. Place shorter parts of the header pins in the both soldering pad locations.



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



4. Driving the board

There are four screw terminals available for further connections: PA, PB, PW and GND. Data is sent to the board using industry standard SPI communication interface.

On-board controller converts the received digital value to the appropriate linearly proportional resistance value.

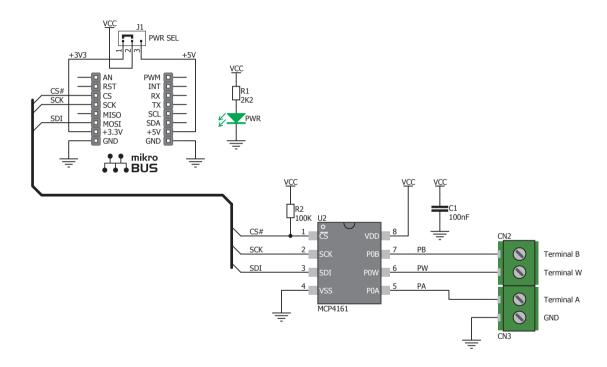


3. Plugging the board in

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



5. DIGIPOT click Board Schematics



6. Power supply selection



On-board **PWR SEL** zeroohm resistor (SMD jumper) is used to determine whether 5V or 3.3V power supply is used. This resistor

is provided in 3.3V position by default. In order to use DIGIPOT click with 5V development system, it is necessary to resolder this jumper to 5V position.

7. Code Examples

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



8. Support

MikroElektronika offers **Free Tech Support** (www.mikroe.com/esupport) until the end of product lifetime, so if something goes wrong, we are ready and willing to help!

