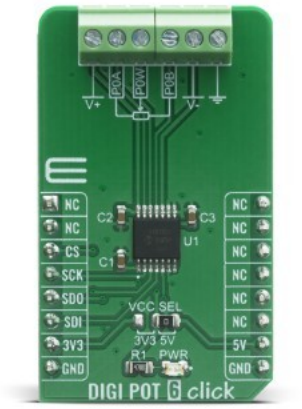
MIKROELEKTRONIKA D.O.O, Batajnički drum 23, 11000 Belgrade, Serbia
VAT: SR105917343 Registration No. 20490918
Phone: + 381 11 78 57 600 Fax: + 381 11 63 09 644 E-mail: office@mikroe.com
www.mikroe.com

DIGI POT 6 Click



PID: MIKROE-4110

DIGI POT 6 Click features the MCP41HVX1 family of devices which have dual power rails (analog and digital). The analog power rail allows high voltage on the resistor network terminal pins. The analog voltage range is determined by the V+ and V- voltages. The maximum analog voltage is +36V, while the operating analog output minimum specifications are specified from either 10V or 20V. As the analog supply voltage becomes smaller, the analog switch resistances increase, which affects certain performance specifications. The system can be implemented as dual rail (±18V) relative to the digital logic ground (DGND). The device also has a Write Latch (WLAT) function, which will inhibit the volatile wiper register from being updated (latched) with the received data until the Write Latch (WLAT) pin is low. This allows the application to specify a condition where the volatile wiper register is updated (such as zero crossing).

DIGI POT 6 Click is supported by a mikroSDK compliant library, which includes functions that simplify software development. This Click board™ comes as a fully tested product, ready to be used on a system equipped with the mikroBUS™ socket.

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

Specifications

Type	Digital potentiometer
Applications	Can be used for a precision calibration of set point thresholds, sensor trimming, LCD bias trimming, audio attenuation, adjustable power supplies, motor control overcurrent trip setting, adjustable gain amplifiers and offset trimming
On-board modules	DIGI POT 6 Click uses the MCP41HV51 IC, 7/8-bit single, +36V (±18V) digital POT with SPI serial interface and volatile memory from Microchip Technology.
Key Features	7/8-bit single digital potentiometer, +36V (±18V) maximum voltage on terminals, SPI communication protocol, low wiper resistance
Interface	SPI
Compatibility	mikroBUS
Click board size	M (42.9 x 25.4 mm)
Input Voltage	3.3V or 5V

Resources

mikroBUS™ Standard specification

Libstock: mikroSDK

Click board catalog

Click boards™ Standard Page

Downloads

DIGI POT 6 click 2D and 3D files

DIGI POT 6 click example on Libstock

MCP41HVX1 datasheet

DIGI POT 6 click schematic