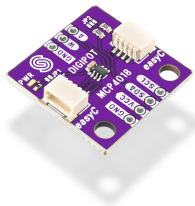


PRODUCT DATASHEET



Digipot MCP4018 Breakout

333090

The Digipot MCP4018 Breakout is a digital potentiometer for precise resistance tuning in microcontroller projects via I2C.

Full product documentation, files and tutorials: solde.red/333090

CORE ATTRIBUTES

SKU **333090**

WEIGHT **4 g**

BARCODE **732388669103**

DESCRIPTION

A **digital potentiometer** acts just like a standard rotary potentiometer, but instead of turning a physical knob, you control the resistance digitally. This makes it perfect for automating adjustments in your circuits without manual intervention.

Powered by the reliable **MCP4018 IC**, this module communicates via I2C for effortless integration into your microcontroller projects. Easily connect it using a single **qwiic** cable! It features 128 discrete steps, allowing for smooth and precise resistance tuning. To ensure it fits perfectly into whatever you are building, we offer this module in four distinct maximum resistance variants: 5k, 10k, 50k, and 100k.

The step resolution depends on the variant you choose. For example, if you use the 50k version, dividing the total resistance by 128 steps gives you a precise tuning resolution of approximately 390 ohm per step.

TECHNICAL DETAILS

- **Voltage:**1.8V - 5V
- **Potentiometer resistance:**5k, 10k, 50k or 100k
- **Dimensions**22 × 22 mm / 0.9 × 0.9 inch

SPECIFICATIONS

INTERFACE	I2C
QWIIC COMPATIBLE	Yes
I2C ADDRESS DEFAULT	0x2F

I2C ADDRESS CHANGEABLE	No
BREADBOARD COMPATIBLE	Yes
IC PART NUMBER	MCP4018
LOGIC LEVEL	3V3 Only

LINKS

Arduino Library	https://github.com/SolderedElectronics/Soldered-Digipot-MCP4018-Arduino-Library
Open Source Hardware Files	https://github.com/SolderedElectronics/Digipot-50k-MCP4018-breakout-hardware-design
Full Documentation	https://docs.soldered.com/digipot/overview/
Arduino: Get Started	https://docs.soldered.com/digipot/arduino/getting-started/
Hardware Details	https://docs.soldered.com/digipot/hardware/
Arduino Library Documentation	https://docs.soldered.com/digipot/arduino/examples/
Pinout	https://cms.soldered.com/products/333090/media/333090_pinout-png_dd274d.svg

GALLERY

