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## ADC 3 Click

www.mikroe.com





PID: MIKROE-1894

ADC 3 Click is a compact add-on board with a high-performance data converter. This board features the MCP3428, a 16-bit  $\Delta\Sigma$  analog-to-digital converter with differential inputs and I2C compatible interface from Microchip. The MCP3428 performs conversions at rates of 15, 60, or 240 samples per second, depending on user-controllable configuration bit settings, and has a programmable gain amplifier which makes it an ideal choice for monitoring extremely lowvoltage sensors. All four channels have differential inputs monitoring a full-scale range of 4.096VDC or ±2.048V differentially. This Click board™ is suitable for various high-accuracy analog-to-digital data conversion applications where ease of use and low power consumption are significant considerations.

ADC 3 Click is supported by a mikroSDK compliant library, which includes functions that simplify software development. This <u>Click board™</u> comes as a fully tested product, ready to be used on a system equipped with the mikroBUS™ socket.

Mikroe produces entire development toolchains for all major microcontroller architectures. Committed to excellency, we are dedicated to helping engineers bring the project development up to speed and achieve outstanding results.







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## **Specifications**

Туре	ADC
Applications	Can be used for various high-accuracy analog- to-digital data conversion applications
On-board modules	MCP3428 - analog-to-digital converter from Microchip
Key Features	ADC with differential inputs, high resolution, self-calibration of internal offset and gain per each conversion, high accuracy, programmable gain amplifier and data rate, two conversion modes, low power consumption, I2C interface with selectable slave address, and more
Interface	I2C
ClickID	No
Compatibility	mikroBUS
Click board size	M (42.9 x 25.4 mm)
Input Voltage	3.3V or 5V

## Resources

<u>mikroBUS™</u>

**mikroSDK** 

Click board™ Catalog

Click Boards™

## **Downloads**

ADC 3 click user manual

ADC 3 click example on Libstock

**ADC 3 click schematic** 

MCP3428 datasheet

ADC 3 click 2D and 3D files

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