

ADC 10 Click



PID: MIKROE-4488

ADC 10 Click is a compact add-on board that contains a high-performance data converter. This board features the ADS122U04, a 24-bit precision $\Delta\Sigma$ analog-to-digital converter with UART compatible interface from Texas Instruments. It features two differential or four single-ended inputs through a flexible input multiplexer, a programmable gain amplifier up to 128, two programmable excitation current sources, a voltage reference, an oscillator, and a temperature sensor. The ADS122U04 offers conversions at data rates up to 2000 samples-per-second with single-cycle settling. This Click board™ is suitable for measuring small sensor signals, such as resistance temperature detectors (RTDs), thermocouples, thermistors, and resistive bridge sensors.

ADC 10 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.

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.



ISO 27001: 2013 certification of informational security management system.
 ISO 14001: 2015 certification of environmental management system.
 OHSAS 18001: 2008 certification of occupational health and safety management system.



ISO 9001: 2015 certification of quality management system (QMS).

Specifications

Type	ADC
Applications	Can be used for measuring small sensor signals, such as resistance temperature detectors (RTDs), thermocouples, thermistors, and resistive bridge sensors.
On-board modules	ADS122U04 - 24-bit precision $\Delta\Sigma$ analog-to-digital converter with UART compatible interface from Texas Instruments MCP1501 - high-precision voltage reference from Microchip LT6656 - high-precision voltage reference from Analog Devices
Key Features	Low power consumption, programmable gain and data rates, two differential or four single-ended inputs, internal and external voltage references, internal temperature sensor, and more
Interface	UART
Compatibility	mikroBUS
Click board size	M (42.9 x 25.4 mm)
Input Voltage	3.3V or 5V

Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click boards™](#)

Downloads

[ADC 10 click 2D and 3D files](#)

[ADC 10 click schematic](#)

[ADS122U04 datasheet](#)

[ADC 10 click example on Libstock](#)

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