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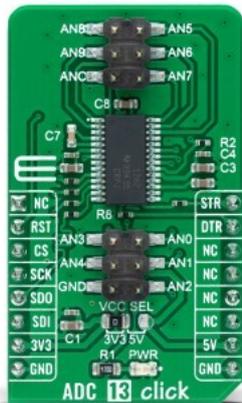www.mikroe.com

ADC 13 Click

PID: MIKROE-4743

ADC 13 Click is a compact add-on board that contains a high-performance data converter. This board features the ADS1262, a 32-bit, high precision, 38-kSPS, analog-to-digital converter with programmable gain amplifier and voltage reference from Texas Instruments. This ADC consists of a low-noise CMOS PGA (gains 1 to 32), a ΔΣ modulator, followed by a programmable digital filter. The flexible analog frontend (AFE) incorporates two sensor-excitation current sources suitable for direct RTD measurement. A single-cycle settling digital filter maximizes multiple input conversion throughput while providing 130dB rejection of 50Hz and 60Hz line cycle interference. This Click board™ offers complete, high accuracy solutions for the most demanding sensor applications, including weighing scales, strain-gauge sensors, thermocouples, and resistance temperature devices (RTD).

ADC 13 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.

Specifications

Type	ADC
Applications	Can be used for the most demanding sensor applications, including weighing scales, strain-gauge sensors, thermocouples, and resistance temperature devices (RTD)
On-board modules	ADS1262 - low noise, low-drift, 38.4kSPS, delta-sigma (ΔΣ) ADC with an integrated PGA, reference, and internal fault monitors from Texas Instruments
Key Features	Low power consumption, low noise and drift, integrated PGA, internal fault monitors, 11 multifunction analog inputs, high accuracy, and more
Interface	SPI
ClickID	No
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 13 click 2D and 3D files

ADS1262 datasheet

ADC 13 click example on Libstock

ADC 13 click schematic