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

ADC 5 click

PID: MIKROE-2846

ADC 5 click is a Click board™ used to sample an analog voltage on the input and convert it to a digital information. ADC 5 click is equipped with the ADC121S021, a low power, single channel 12-bit CMOS analog to digital converter (ADC), with a high-speed serial interface. This device uses the SAR algorithm for sampling the input voltage which, coupled with relatively high bit depth, gives a pretty accurate digital reconstruction of the input voltage. The main feature of this ADC device is its continuous reliability over a wide range of sample rates. The functional specifications are maintained in the range from 50kSPS up to 200kSPS. It performs according to specification over the whole range, maintaining a good linearity and high signal to noise ratio up to 72dB, typical.

Specifications

Type	ADC
Applications	ADC 5 click can be used to digitally convert input voltage signals up to 3.3V so that the signals can be analyzed by various algorithms on the CPU or a MCU.
On-board modules	ADC121S021 a single channel, 50ks/s to 200Ks/s, a 12-Bit SAR ADC, LP2950 - micropower voltage regulator with low voltage drop, both made by Texas Instruments.
Key Features	The ADC 5 click specified to work with sample rates from 50Ks/s to 200Ks/s. It uses a precise LDO as a reference voltage source and SAR approximation method of sampling
Interface	SPI
Compatibility	mikroBUS
Click board size	M (42.9 x 25.4 mm)
Input Voltage	5V

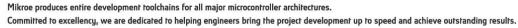## Resources

mikroBUS™

mikroSDK

Click board™ Catalog

Click Boards™

Downloads

ADC121S021 datasheet

ADC 5 click schematic

ADC 5 click example on Libstock

ADC 5 click 2D and 3D files