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CDC Click





PID: MIKROE-5985

CDC Click is a compact add-on board that allows your application do a conversion of capacitance to a digital format. This board features the <u>PCAP04</u>, a capacitance-to-digital converter (CDC) from <u>ScioSense</u>. It also includes an integrated digital signal processor (DSP) for on-chip data post-processing. The converter has high flexibility and allows you to convert grounded capacitors and floating capacitors to a digital format. It has up to 50KHz sampling rate in up to 20-bit resolution. This Click board [™] makes the perfect solution for the development of measuring devices, industrial applications, sensitive equipment, and more.

CDC Click is fully compatible with the mikroBUS[™] socket and can be used on any host system supporting the <u>mikroBUS[™]</u> standard. It comes with the <u>mikroSDK</u> open-source libraries, offering unparalleled flexibility for evaluation and customization. What sets this <u>Click board[™]</u> apart is the groundbreaking <u>ClickID</u> feature, enabling your host system to seamlessly and automatically detect and identify this add-on board.

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. OHSA5 18001: 2008 certification of occupational health and safety management system.



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



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Specifications

Туре	Capacitive
Applications	Can be used for the development of measuring devices, industrial applications, sensitive equipment, and more
On-board modules	PCAP04 - capacitance-to-digital converter from ScioSense
Key Features	Capacitance-to-digital converter, resistance-to- digital converter, high flexibility, ultra-low power, high resolution, high speed, on-chip DSP for sensor algorithms, on-chip and external temperature measurement capabilities, and more
Interface	I2C,SPI
ClickID	Yes
Compatibility	mikroBUS™
Click board size	M (42.9 x 25.4 mm)
Input Voltage	3.3V

Resources

<u>mikroBUS</u>™

<u>mikroSDK</u>

Click board[™] Catalog

Click Boards[™]

<u>ClickID</u>

Downloads

CDC click example on Libstock

CDC click 2D and 3D files

CDC click schematic

PCAP04 datasheet

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