

Time-saving embedded tools

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LDC Touch Click





PID: MIKROE-5204

LDC Touch Click is a compact add-on board optimized for inductive touch applications. This board features the LDC3114-Q1, a four-channel inductance-to-digital converter for low-power proximity and touch-button sensing from Texas Instruments. It comes with an adjustable sensitivity per input channel and operational power mode selection and measures frequency shifts caused by micro-deflection in the conductive targets formed by button presses. These presses are reported through a compatible I2C interface beside four LED indicators for its visual indication. This Click board[™] enables touch button design for human-machine interface and precise linear position sensing of metal targets for automotive, consumer, and industrial applications by allowing access to the raw data representing the inductance value.

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



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Specifications

Туре	Capacitive
Applications	Can be used for human-machine interface and precise linear position sensing of metal targets for automotive, consumer, and industrial applications
On-board modules	LDC3114-Q1 - hybrid multichannel, high- resolution inductance-to-digital converter from Texas Instruments
Key Features	AEC-Q100 qualified, multiple modes of operation, configurable scan rates, advanced button press detection algorithms, low power consumption, and more
Interface	I2C
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V

Resources

<u>mikroBUS</u>™

<u>mikroSDK</u>

Click board[™] Catalog

Click Boards[™]

Downloads

LDC Touch click example on Libstock

LDC Touch click 2D and 3D files

TLV700 datasheet

LDC3114-Q1 datasheet

LDC Touch click schematic

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