

Load Cell 2 Click



PID: MIKROE-4047

Load cell 2 Click is a weight measurement click which utilizes a load cell element, in order to precisely measure the weight of an object. The Load Cell 2 Click can be used with the strain gauge type of load cells with external differential reference voltage range from 0.1V to 5V. The strain gauge load cell is typically a circuit made of four strain gauges, connected in the Wheatstone bridge configuration. Very small voltage changes need to be accurately detected and converted into a digital form. The Load Cell 2 Click is based around the [NAU7802](#), which is a 24-bit analog-to-digital converter, operated via a simple I2C command, from [Nuvoton](#). This sensor has many features that make it a perfect solution for small designs. One of these features is certainly its high level of integration that allows a minimal number of external components.

Load Cell 2 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	Force
Applications	NAU7802 provides a complete front-end solution for bridge/sensor measurement such as in weigh scales, strain gauges, and many other high resolution, low sample rate applications.
On-board modules	NAU7802 24-Bit Dual-Channel ADC For Bridge Sensors
Key Features	NAU7802 is a precision low-power 24-bit analog-to-digital converter (ADC), with an onboard low-noise programmable gain amplifier (PGA), onboard RC or Crystal oscillator, and a precision 24-bit sigma-delta (Σ - Δ) analog to digital converter (ADC)
Interface	I2C
ClickID	No
Compatibility	mikroBUS
Click board size	S (28.6 x 25.4 mm)
Input Voltage	3.3V

Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click Boards™](#)

Downloads

[Load Cell 2 click example on Libstock](#)

[Load Cell 2 click 2D and 3D files](#)

[NAU7802 datasheet](#)

[Load Cell 2 click schematic](#)

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