

H-Bridge 7 Click



PID: MIKROE-4143

H-Bridge 7 Click features flexible motor driver IC for a wide variety of applications, labeled as the DRV8876N. This Click board™ integrates an N-channel H-bridge, charge pump regulator, and protection circuitry. The charge pump improves efficiency by allowing for both high-side and low-side N-channels MOSFETs and 100% duty cycle support. This IC allows the H-Bridge 7 Click to achieve ultra-low quiescent current draw by shutting down most of the internal circuitry with his low-power sleep mode. Internal protection features are provided for supply undervoltage lockout (UVLO), charge pump undervoltage (CPUV), output overcurrent (OCP), and device overtemperature (TSD). Fault conditions are indicated on the nFAULT pin (nFT pin on mikroBUS™). H-Bridge 7 Click can be used for DC Brush motor drive, servo motors, actuators, and more.

The H-Bridge 7 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	Brushed
Applications	Can be used for DC Brush motor drive, servo motors, actuators, and more.
On-board modules	H-Bridge 7 Click uses the DRV8876N IC, N-channel H-bridge motor driver from Texas Instruments, that operates from a supply voltage of 4.5V to 37V supporting a wide range of output load currents for various types of motors and loads.
Key Features	N-channel H-bridge, charge pump regulator, protection circuitry, undervoltage lockout, charge pump undervoltage, output overcurrent, device overtemperature protection
Interface	GPIO
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

[DRV8876N datasheet](#)

[H-Bridge 7 click 2D and 3D files](#)

[H-Bridge 7 click example on Libstock](#)

[H-Bridge 7 click schematic](#)

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