

Time-saving embedded tools

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## PID: MIKROE-4185

**Accel 14 Click** is digital acceleration and vibration sensor Click board<sup>™</sup>. It features an ultrawide bandwidth, low-noise, 3-axis digital vibration sensor, labeled as <u>IIS3DWB</u>, from <u>STMicroelectronics</u>. This Click board<sup>™</sup> allows selectable full-scale acceleration measurements in ranges of ±2 g, ±4 g, ±8, and ±16 g in three axes, and it's capable of measuring accelerations with a bandwidth up to 6 kHz with an output data rate of 26.7 kHz. For accessing sensor registers from any host controller communication is accomplished through a standard SPI serial interface. Along with its serial interface, the sensor can use any of its two interrupt pins to report a detected event. It has many features that make it attractive for various applications such as vibration and condition monitoring, test and measurements, predictive maintenance, and more.

Accel 14 Click is supported by a mikroSDK compliant library, which includes functions that simplify software development. This Click board<sup>™</sup> comes as a fully tested product, ready to be used on a system equipped with the mikroBUS<sup>™</sup> 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	Acceleration, Motion, Vibration
Applications	It has many features that make it attractive for various applications such as vibration and condition monitoring, test and measurements, predictive maintenance, and more.
On-board modules	IIS3DWB
Key Features	Ultra-wide bandwidth, ultra-low noise density, high stability, low power consumption, thermal readings.
Interface	GPIO,SPI
ClickID	No
Compatibility	mikroBUS
Click board size	S (28.6 x 25.4 mm)
Input Voltage	3.3V

## Resources

<u>mikroBUS</u>™

<u>mikroSDK</u>

Click board<sup>™</sup> Catalog

Click boards<sup>™</sup>

## **Downloads**

**IIS3DWB** datasheet

Accel 14 Click schematic

Accel 14 click 2D and 3D files

Accel 14 click example on Libstock

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