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## **Accel 16 Click**



PID: MIKROE-4876

Accel 16 Click is a compact add-on board that contains an acceleration sensor. This board features the ADXL363, a micropower three-sensor combination including acceleration and temperature from Analog Devices. This device combines a 3-axis MEMS accelerometer, a temperature sensor, and an analog-to-digital converter (ADC) input for synchronized conversions of external signals. It allows selectable full-scale acceleration measurements in ranges of  $\pm 2g$ ,  $\pm 4g$ , and  $\pm 8g$  (with a resolution of 1mg/LSB on the  $\pm 2g$  range), and communicates via SPI serial interface providing 12-bit output resolution for all three sensors. This Click board  $^{\text{TM}}$  is suitable for various applications such as vibration and condition monitoring, test and measurements, predictive maintenance, and more.

Accel 16 Click is supported by a  $\underline{\mathsf{mikroSDK}}$  compliant library, which includes functions that simplify software development. This  $\underline{\mathsf{Click}}$  board  $\underline{\mathsf{mikroBUS}}^{\mathsf{m}}$  comes as a fully tested product, ready to be used on a system equipped with the  $\underline{\mathsf{mikroBUS}}^{\mathsf{m}}$  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.





health and safety management system.



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## **Specifications**

Туре	Motion
Applications	Can be used for various applications such as vibration and condition monitoring, test and measurements, predictive maintenance, and more
On-board modules	ADXL363 - micropower complete sensor suite consisting of an accelerometer, an ADC for synchronous conversion of input from a third sensor, and a temperature sensor from Analog Devices
Key Features	Accelerometer, temperature sensor, and provision for third analog sensor input, low power consumption, all sensors sampled synchronously, 12-bit resolution for all sensors, built-in features for motion-based system level power savings, and more
Interface	SPI
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**

Accel 16 click 2D and 3D files

Accel 16 click schematic

**ADXL363 datasheet** 

Accel 16 click example on Libstock

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