

# ACCEL SPI BOARD™

## Manual

*All Mikroelektronika's development systems feature a large number of peripheral modules expanding microcontroller's range of application and making the process of program testing easier. In addition to these modules, it is also possible to use numerous additional modules linked to the development system through the I/O port connectors. Some of these additional modules can operate as stand-alone devices without being connected to the microcontroller.*

# Additional board

 **MikroElektronika**

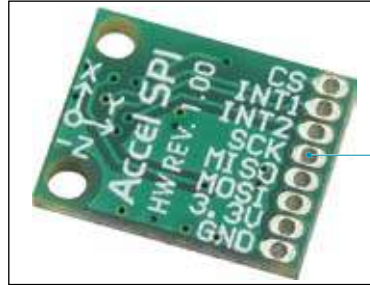
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## ACCEL SPI BOARD

*Accel SPI Board* is used to measure acceleration and gravity. The measurement on the additional board is performed by using the ADXL345 accelerometer circuit. The additional board is connected to the microcontroller on the development board via pads and communicates with the microcontroller by using serial SPI interface.



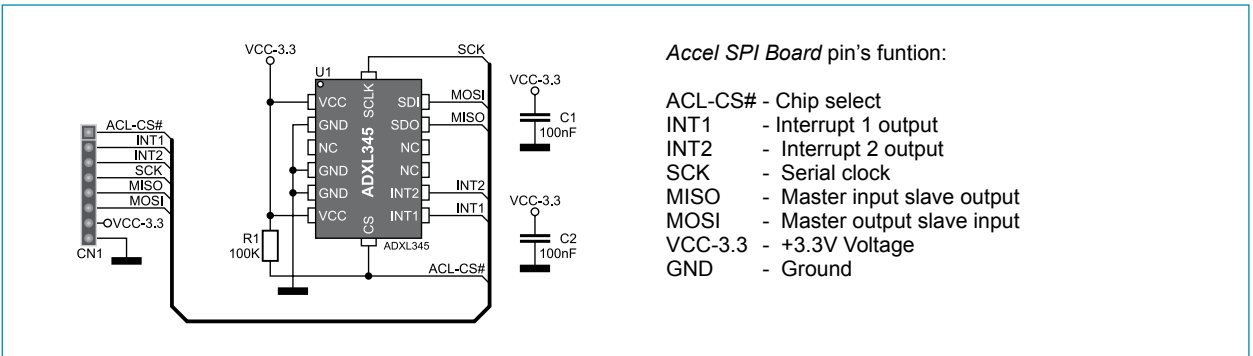
**Figure 1:** *Accel SPI Board*



**Figure 2:** *Accel SPI Board's back side*

Eight pads for connecting the additional board to the microcontroller on the development system or to some device

*Accel SPI Board* is a low-power additional board, thus making it suitable for integrating into mobile devices. The additional board is used to measure dynamic and static acceleration in 13-bit resolution ranging +/- 16g.



*Accel SPI Board* pin's funtion:

- ACL-CS# - Chip select
- INT1 - Interrupt 1 output
- INT2 - Interrupt 2 output
- SCK - Serial clock
- MISO - Master input slave output
- MOSI - Master output slave input
- VCC-3.3 - +3.3V Voltage
- GND - Ground

**Figure 3:** *Accel SPI Board* connection schematic