

Data brief

3-axis digital accelerometer sensor kit based on LIS25BA





Product summary	
3-axis digital accelerometer sensor kit based on LIS25BA	STEVAL- MKI211V1K
MEMS digital output motion sensor: low- noise, high-bandwidth 3- axis accelerometer with TDM interface	LIS25BA
Professional MEMS tool: evaluation board for all ST MEMS sensors	STEVAL- MKI109D
Applications	loT for smart things

Features

- User-friendly LIS25BA board
- Complete LIS25BA pinout for a standard DIL24 socket
- Fully compatible with the STEVAL-MKI109D evaluation platform
- Double-sided adhesives included for easy mounting on equipment to be measured
- RoHS compliant

Description

The STEVAL-MKI211V1K evaluation board has an embedded LIS25BA 3-axis accelerometer, which is connected using a flat cable to a simple adapter board (STEVAL-MKIGIBV3) to render it compatible with the STEVAL-MKI109D.

The sensor is soldered precisely in the center of the board and double-sided adhesives are provided to allow users to conveniently mount the board on equipment destined for vibration analysis. Alternatively, you can mount the board using the holes located in each corner of the PCB.

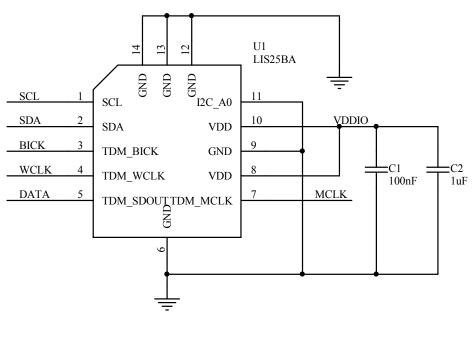
The STEVAL-MKIGIBV3 can be plugged into a standard DIL24 socket. The kit provides the complete LIS25BA pinout and comes ready to use with the required decoupling capacitors on the VDD power supply line.

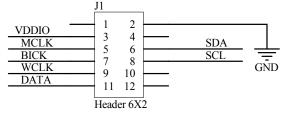
This adapter is supported by the STEVAL-MKI109D evaluation platform that includes a high-performance 32-bit microcontroller functioning as a bridge between the sensor and a PC, on which it is possible to use the downloadable MEMS Studio graphical user interface or dedicated software routines for customized applications.

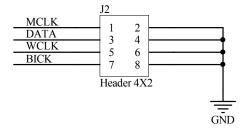


Schematic diagrams

Figure 1. STEVAL-MKI211V1 circuit schematic



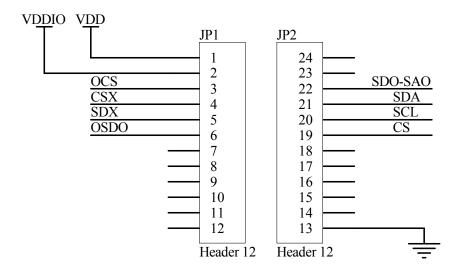


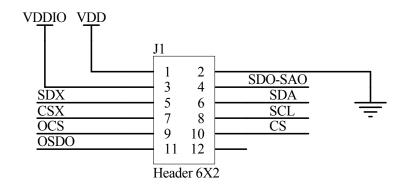


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Figure 2. STEVAL-MKIGIBV3 circuit schematic





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Revision history

Table 1. Document revision history

Date	Version	Changes
10-Dec-2019	1	Initial release
19-Feb-2025	2	Added STEVAL-MKI109D evaluation platform and MEMS Studio software solution Updated Product summary table Minor textual updates

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