

Data brief

## MEMS inclinometer kit based on IIS2ICLX





Product summary	
MEMS inclinometer kit based on IIS2ICLX	STEVAL- MKI209V1K
High-accuracy, high- resolution, low-power, 2- axis digital inclinometer with embedded machine learning core	IIS2ICLX
Professional MEMS tool: evaluation board for all ST MEMS sensors	STEVAL- MKI109D
Applications	Industrial automation

### **Features**

- User-friendly IIS2ICLX board
- Complete IIS2ICLX pinout for a standard DIL24 socket
- Double-sided adhesives included for easy mounting on equipment to be measured
- Fully compatible with the STEVAL-MKI109D evaluation platform
- RoHS compliant

## **Description**

The STEVAL-MKI209V1K evaluation board has an embedded IIS2ICLX inclinometer sensor, which is connected using a flat cable to a simple adapter board (STEVAL-MKIGIBV2) 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-MKIGIBV2 can be plugged into a standard DIL24 socket. The kit provides the complete IIS2ICLX 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-MKI209V1 board schematic

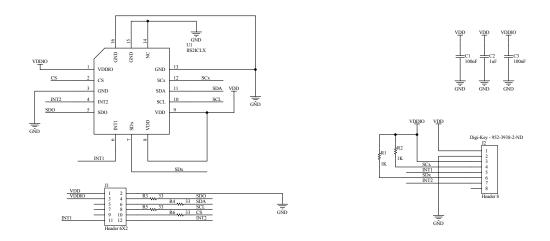
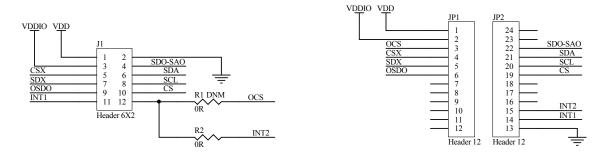


Figure 2. STEVAL-MKIGIB2V1 board schematic



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## **Revision history**

Table 1. Document revision history

Date	Version	Changes
11-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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