



## Digital inclinometer kit based on IIS3DHHC





Product summary		
Digital inclinometer kit based on IIS3DHHC	STEVAL- MKI216V1K	
High-resolution, high- stability 3-axis digital accelerometer for industrial applications	IIS3DHHC	
Professional MEMS tool: ST MEMS adapters motherboard based on the STM32F401VE and compatible with all ST MEMS adapters	STEVAL- MKI109V3	
Professional MEMS tool: evaluation board for all ST MEMS sensors	STEVAL- MKI109D	
Applications	Position and motion monitoring	

### **Features**

- User-friendly IIS3DHHC board
- Complete IIS3DHHC pinout for a standard DIL24 socket
- Fully compatible with the STEVAL-MKI109V3 and STEVAL-MKI109D evaluation platforms
- Double-sided adhesives included for easy mounting on equipment to be measured
- RoHS and WEEE compliant

### **Description**

The STEVAL-MKI216V1K is an adapter board designed to facilitate the evaluation of the IIS3DHHC 3-axis accelerometer. The board is connected using a cable to the STEVAL-MKIGIBV5 adapter board to render it compatible with the STEVAL-MKI109V3 and STEVAL-MKI109D evaluation platforms.

The sensor is soldered precisely in the center of the STEVAL-MKI216V1 and double-sided adhesives are provided to allow users to conveniently mount the board on equipment used for vibration analysis. Alternatively, you can mount the board using the holes located in each corner of the PCB.

The STEVAL-MKIGIBV5 can be plugged into a standard DIL24 socket. The kit provides the complete IIS3DHHC pinout and comes ready to use with the required decoupling capacitors on the VDD power supply line.

The adapter is supported by the STEVAL-MKI109V3 and STEVAL-MKI109D evaluation platforms that include 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-MKIGIBV5 board schematics

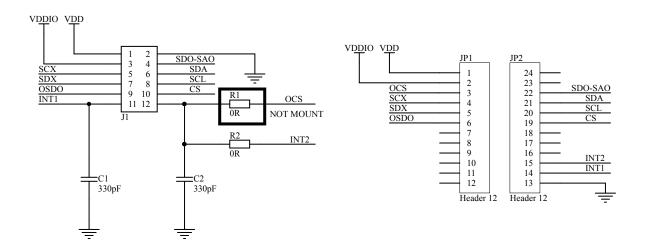
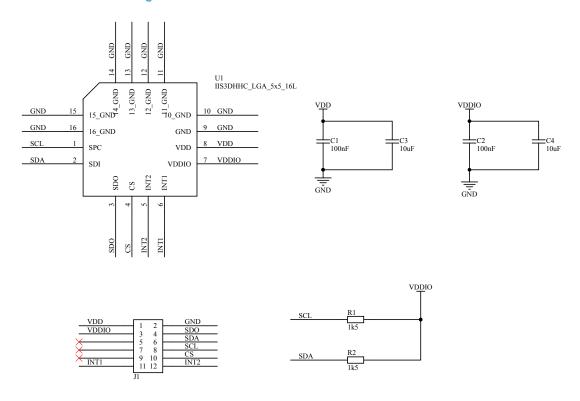


Figure 2. STEVAL-MKI216V1K board schematics



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## **Revision history**

Table 1. Document revision history

Date	Version	Changes
12-Nov-2020	1	Initial release
14-Feb-2025	2	Added STEVAL-MKI109D evaluation platform and MEMS Studio software solution  Updated Product summary table  Minor textual updates

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