



### Data brief

## iNemo inertial module kit based on ISM330DHCX





Product summary		
iNemo inertial module kit based on ISM330DHCX	STEVAL- MKI210V1K	
3D Accelerometer + 3D Gyro iNEMO Inertial measurement unit (IMU) with machine learning core	ISM330DHCX	
ST MEMS adapter motherboard based on STM32F401VE compatible ST MEMS adapters	STEVAL- MKI109V3	
Application	Internet of Things	

#### **Features**

- User friendly ISM330DHCX board
- Complete ISM330DHCX pinout for a standard DIL 24 socket
- Double-sided adhesives included for easy mounting on equipment to be measured
- Fully compatible with and STEVAL-MKI109V3 motherboard
- RoHS compliant

### **Description**

The STEVAL-MKI210V1 evaluation board has an embedded ISM330DHCX 3D accelerometer and 3D gyroscope sensor, which is connected through flat cable to a simple adapter board (STEVAL-MKIGIBV2) to render it compatible with STEVAL-MKI109V3.

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.

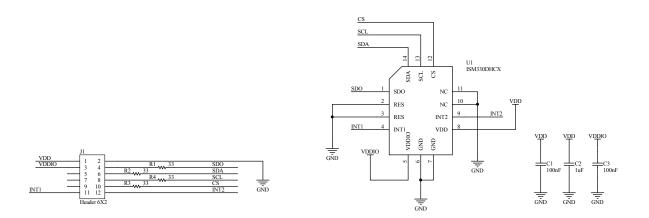
The STEVAL-MKIGIBV2 can be plugged into a standard DIL 24 socket. The kit provides the complete ISM330DHCX pin-out and comes ready-to-use with the required decoupling capacitors on the VDD power supply line.

This adapter is supported by the STEVAL-MKI109V3 motherboard with high performance 32-bit microcontroller functioning as a bridge between the sensor and a PC, on which it is possible to use the downloadable graphical user interface (Unico GUI), or dedicated software routines for customized applications.

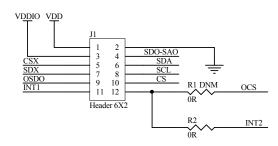


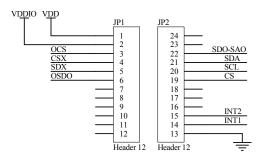
# **1** Schematic diagrams

#### Figure 1. STEVAL-MKI210V1 board schematic



#### Figure 2. STEVAL-MKIGIBV2 board schematic





# **Revision history**

Date	Version	Changes
09-Dec-2019	1	Initial release.
04-Feb-2021	2	Updated Section Description

#### Table 1. Document revision history

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