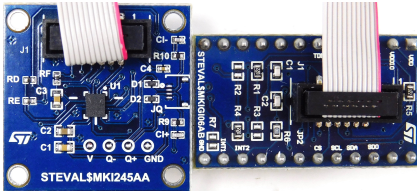


## 3D accelerometer and 3D gyroscope sensor industrial kit with TDM interface based on ISM330BX



### Features

- User friendly ISM330BX board
- Complete ISM330BX pinout for a standard DIL 24 socket
- Fully compatible with and [STEVAL-MKI109V3](#) motherboards
- RoHS compliant

### Description

The [STEVAL-MKI245KA](#) demonstration board is a kit made up of an ad hoc PCB, mounting the [ISM330BX](#) 3D accelerometer and 3D, which is connected through flat cable to a generic adapter board ([STEVAL-MKIGI06A](#)) to make it compatible with the [STEVAL-MKI109V3](#). The presence of this square PCB ensures to put the sensor board on the system must be measured.

The device [ISM330BX](#) is soldered exactly in the center of the board.

The [STEVAL-MKIGI06A](#) can be plugged into a standard DIL 24 socket. The kit provides the complete [ISM330BX](#) pin-out and comes ready-to-use with the required decoupling capacitors on the VDD and VDDIO power supply lines.

This adapter is supported by the [STEVAL-MKI109V3](#) motherboards which 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 graphical user interface ([MEMS-Studio](#)), or dedicated software routines for customized applications.

It is also possible to plug in the kit on [X-NUCLEO-IKS02A1](#).

Product summary	
3D accelerometer and 3D gyroscope sensor industrial kit with TDM interface based on ISM330BX	<a href="#">STEVAL-MKI245KA</a>
6-axis IMU with wide bandwidth, low-noise accelerometer, embedded sensor fusion, and AI for industrial applications	<a href="#">ISM330BX</a>
Professional MEMS tool: ST MEMS adapters motherboard based on the STM32F401VE and compatible with all ST MEMS adapters	<a href="#">STEVAL-MKI109V3</a>
Motion MEMS and microphone MEMS expansion board for STM32 Nucleo	<a href="#">X-NUCLEO-IKS02A1</a>
Applications	Industrial robots

# 1 Schematic diagrams

Figure 1. STEVAL-MKIGI06A circuit schematic

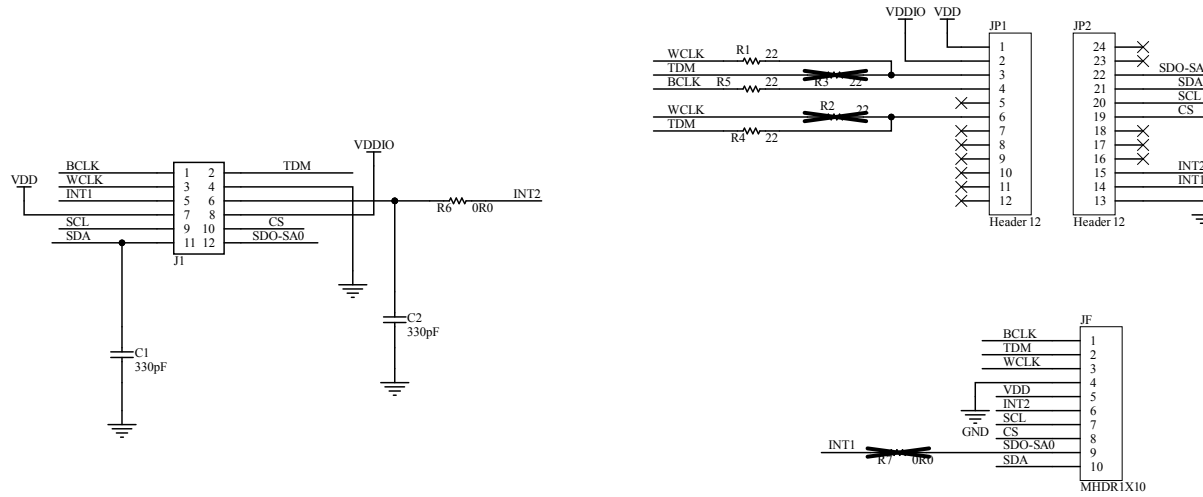
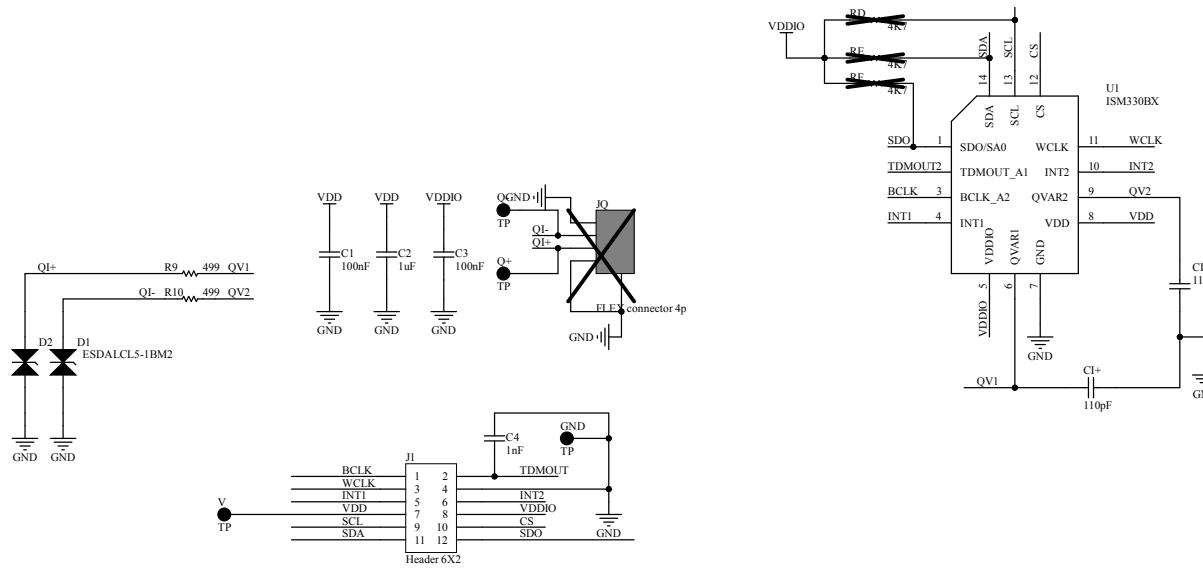


Figure 2. STEVAL-MKI245A circuit schematic



## 2 Kit versions

Table 1. STEVAL-MKI245KA versions

PCB version	Schematic diagrams	Bill of materials
STEVAL\$MKI245KAA <sup>(1)</sup>	STEVAL\$MKI245KAA schematic diagrams	STEVAL\$MKI245KAA bill of materials

1. This code identifies the STEVAL-MKI245KA evaluation kit first version. The kit consists of a STEVAL-MKI245A whose version is identified by the code STEVAL\$MKI245AA and a STEVAL-MKIGI06A whose version is identified by the code STEVAL\$MKIGI06AB.

## Revision history

Table 2. Document revision history

Date	Revision	Changes
03-Apr-2024	1	Initial release.



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