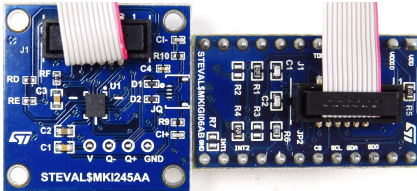


ISM330BX evaluation kit based on 6-axis IMU with wide bandwidth, low-noise accelerometer, embedded sensor fusion, and AI for industrial applications



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](#) 6-axis IMU, 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 to 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	
ISM330BX evaluation kit based on 6-axis IMU with wide bandwidth, low-noise accelerometer, embedded sensor fusion, and AI for industrial applications	STEVAL-MKI245KA
6-axis IMU with wide bandwidth, low-noise accelerometer, embedded sensor fusion, and AI for industrial applications	ISM330BX
Professional MEMS tool: ST MEMS adapters motherboard based on the STM32F401VE and compatible with all ST MEMS adapters	STEVAL-MKI109V3
Motion MEMS and microphone MEMS expansion board for STM32 Nucleo	X-NUCLEO-IKS02A1
Applications	Industrial robots

2 Kit versions

Table 1. STEVAL-MKI245KA versions

PCB version	Schematic diagrams	Bill of materials
STEVAL\$MKI245KAA ⁽¹⁾	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.
12-Jul-2024	2	Updated Title, Product summary and Description.

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