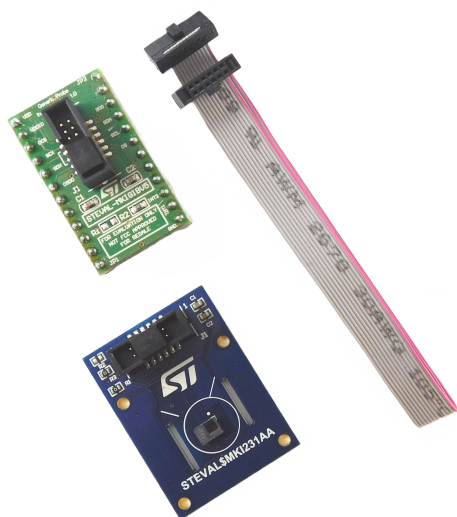


## Evaluation kit composed of the STHS34PF80 industrial board and a standard DIL24 adapter



### Features

- User-friendly [STHS34PF80](#) board
- Complete [STHS34PF80](#) pinout for a standard DIL24 socket
- Fully compatible with the [STEVAL-MKI109V3](#) motherboard
- RoHS compliant

### Description

The [STEVAL-MKI231KA](#) demonstration board is a kit consisting of a specific PCB, mounting the [STHS34PF80](#) low-power, high-sensitivity infrared sensor for presence and motion detection, which is connected through a flat cable to a generic adapter board ([STEVAL-MKIGIBV5](#)) to make it compatible with the [STEVAL-MKI109V3](#). A plastic holder with a Fresnel lens (TMOS63-10) has been provided in the kit for better performance of the device in terms of data acquisition for some applications.

The [STEVAL-MKIGIBV5](#) can be plugged into a standard DIL24 socket. The kit provides the complete [STHS34PF80](#) pinout 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, which includes a high-performance 32-bit microcontroller functioning as a bridge between the sensor and a PC.

It is also possible to plug the board into [X-NUCLEO-IKS01A3](#), [X-NUCLEO-IKS02A1](#), or [X-NUCLEO-IKS4A1](#). The kit is included in an [X-CUBE-MEMS1](#) expansion software package for STM32.

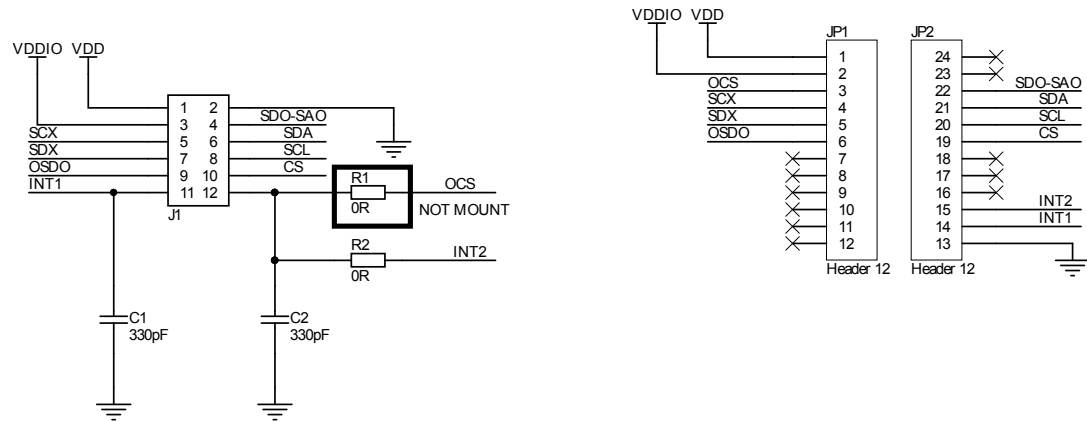
[MEMS-Studio](#) is a complete software solution for the evaluation and programming of all MEMS sensors and it is available for [Linux](#), [macOS](#), and [Windows](#) operating systems.

You can also use the downloadable graphical user interface ([Unico-GUI](#)) or dedicated software routines for customized applications.

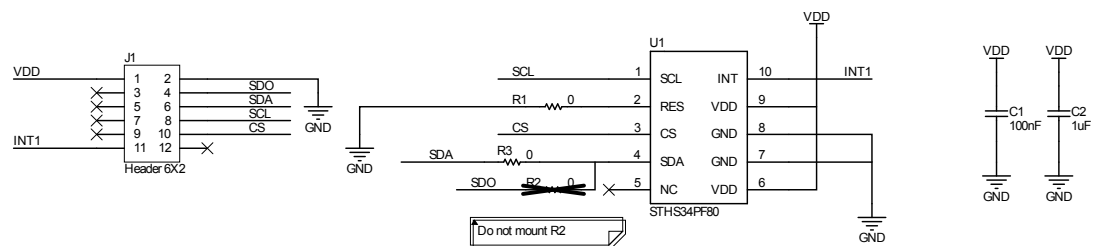
Product summary	
Evaluation kit composed of STHS34PF80 industrial board and standard DIL24 adapter	<a href="#">STEVAL-MKI231KA</a>
Low-power, high-sensitivity infrared (IR) sensor for presence and motion detection	<a href="#">STHS34PF80</a>
Professional MEMS tool: ST MEMS adapters motherboard based on 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/X-NUCLEO-IKS4A1</a>
Expansion software package for STM32Cube that runs on the STM32	<a href="#">X-CUBE-MEMS1</a>
Applications	<a href="#">Presence sensing</a>

# 1 Schematic diagrams

**Figure 1. STEVAL-MKIGIBV5 circuit schematic**



**Figure 2. STEVAL-MKI231A circuit schematic**



## 2 Kit versions

**Table 1. STEVAL-MKI231KA kit versions**

Finished good	Schematic diagrams	Bill of materials
STEVAL\$MKI231KAA <sup>(1)</sup>	STEVAL\$MKI231KAA schematic diagrams	STEVAL\$MKI231KAA bill of materials

1. This code identifies the STEVAL-MKI231KA evaluation kit first version. The kit consists of a STEVAL-MKI231A whose version is identified by the code STEVAL\$MKI231AA and a STEVAL-MKIGIBV5 whose version is identified by the code STEVAL\$MKIGIBV5A

## Revision history

**Table 2. Document revision history**

Date	Revision	Changes
15-Jun-2023	1	Initial release
06-Oct-2023	2	Updated Description and Product summary
07-Dec-2023	3	Added references to X-NUCLEO-IKS4A1. Updated Description and Product summary.
13-Jun-2024	4	Updated <a href="#">Description</a> to include MEMS-Studio software solution Minor textual updates

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