

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-MKI109D](#) evaluation platform
- 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-MKI109D](#). 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-MKI109D](#) evaluation platform, 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 [MEMS Studio](#) graphical user interface or dedicated software routines for customized applications. It is also possible to plug the board into [X-NUCLEO-IKS02A1](#) or [X-NUCLEO-IKS4A1](#). The kit is included in an [X-CUBE-MEMS1](#) expansion software package for STM32.

Product summary	
Evaluation kit composed of STHS34PF80 industrial board and standard DIL24 adapter	STEVAL-MKI231KA
Low-power, high-sensitivity infrared (IR) sensor for presence and motion detection	STHS34PF80
Professional MEMS tool: evaluation board for all ST MEMS sensors	STEVAL-MKI109D
Motion MEMS and microphone MEMS expansion board for STM32 Nucleo	X-NUCLEO-IKS02A1 / X-NUCLEO-IKS4A1
Sensor and motion algorithm software expansion for STM32Cube	X-CUBE-MEMS1
Applications	Presence sensing

1 Schematic diagrams

Figure 1. STEVAL-MKIGIBV5 circuit schematic

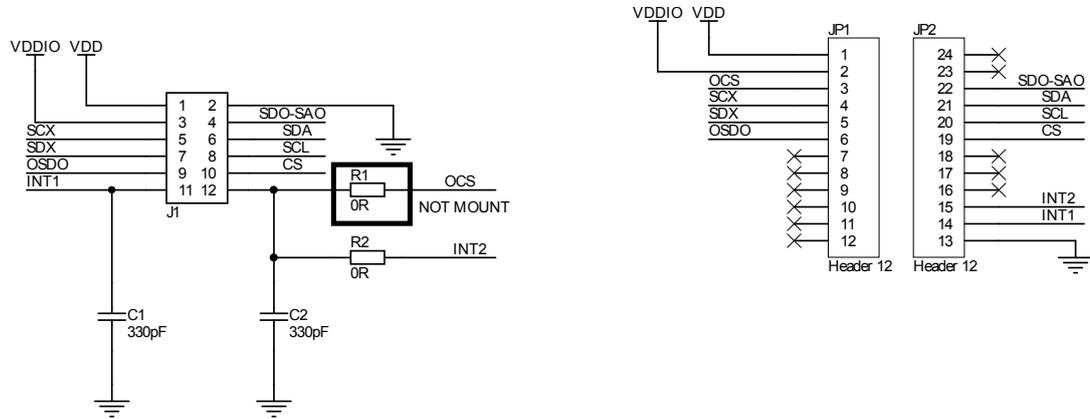
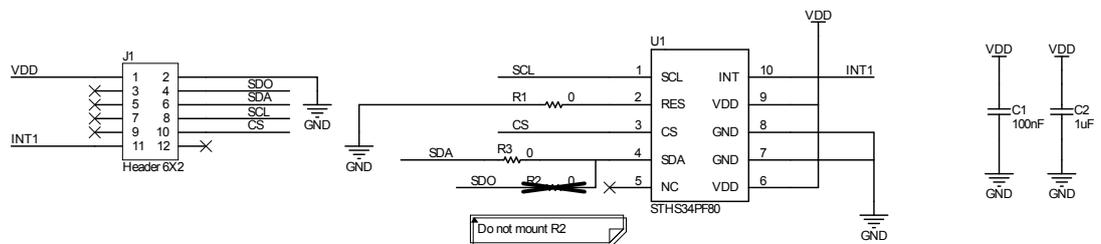


Figure 2. STEVAL-MKI231A circuit schematic



2 Kit versions

Table 1. STEVAL-MKI231KA kit versions

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

1. This code identifies the first version of the STEVAL-MKI231KA evaluation kit. The kit consists of the STEVAL-MKI231A whose version is identified by the code STEVAL\$MKI231AA and the 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 Description to include MEMS Studio software solution Minor textual updates
05-Jun-2025	5	Added STEVAL-MKI109D evaluation platform



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