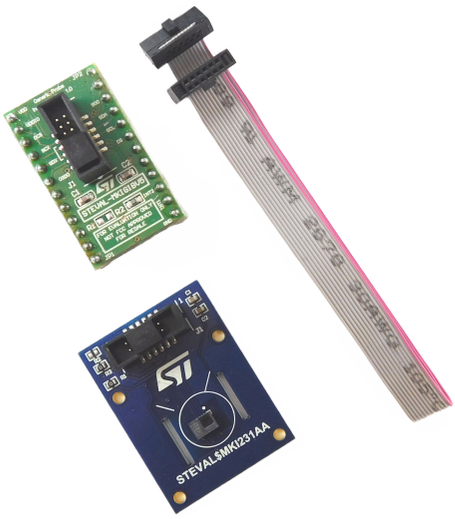
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STEVAL-MKI231KA

Data brief

Evaluation kit composed by STHS34PF80 industrial board and standard DIL24 adapter



Features

- User friendly STHS34PF80 board
- Complete STHS34PF80 pin-out for a standard DIL24 socket
- Fully compatible with the STEVAL-MKI109V3 motherboard
- RoHS compliant

Description

The STEVAL-MKI231KA demonstration board is a kit made up of an ad hoc PCB, mounting the STHS34PF80 low-power, high-sensitivity infrared sensor for presence and motion detection, which is connected through flat cable to a generic adapter board (STEVAL-MKIGIBV5) to make it compatible with the STEVAL-MKI109V3. An ad hoc plastic holder with a Fresnel lens (TMOS63-10) has been provided into the kit to verify best performances of the device.

The STEVAL-MKIGIBV5 can be plugged into a standard DIL 24 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, on which it is possible to use the downloadable graphical user interface (Unico-GUI), or dedicated software routines for customized applications.

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

Product summary	
Evaluation kit composed by 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: 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/X-NUCLEO-IKS4A1
Expansion software package for STM32Cube that runs on the STM32	X-CUBE-MEMS1
Applications	Presence Sensing

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1 Schematic diagrams

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

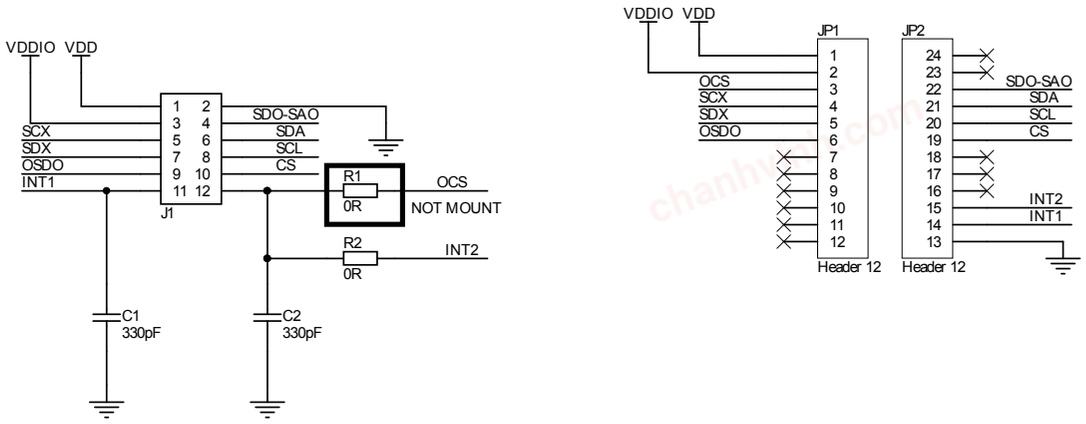
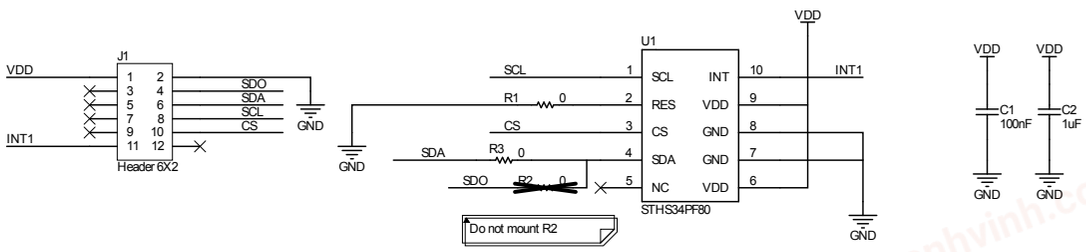


Figure 2. **STEVAL-MKI231A circuit schematic**



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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 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*

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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.

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