

Data brief

iNEMO inertial module kit based on ISM330IS







Product summary iNEMO inertial module kit STEVALbased on ISM330IS MKI230KA iNEMO inertial module: always-on 3D accelerometer and 3D ISM330IS gyroscope with embedded ISPU - intelligent sensor processing unit MEMS adapter STEVALmotherboard based on the MKI109V3 STM32F401VE Motion MEMS and X-NUCLEOmicrophone MEMS expansion board for IKS02A1 STM32 Nucleo **Applications Gas Metering**

Features

- User friendly ISM330IS board
- Complete ISM330IS pin-out for a standard DIL24 socket
- Fully compatible with the STEVAL-MKI109V3 motherboard
- RoHS compliant

Description

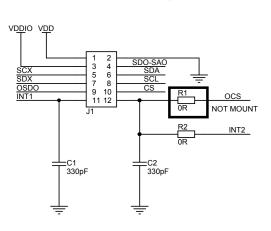
The STEVAL-MKI230KA evaluation kit consists of the STEVAL-MKI230A main sensing board, with a square PCB, which mounts the ISM330IS 3-axis accelerometer and 3-axis gyroscope with embedded ISPU, the STEVAL-MKIGIBV5 adapter board, and a flat cable. The main board is connected to the adapter board through the flat cable to make it compatible with the STEVAL-MKI109V3.

The sensing board can be directly attached to the system to be measured through the provided adhesive.

The ISM330IS is soldered exactly in the center of the board.

The STEVAL-MKIGIBV5 can be plugged into a standard DIL24 socket. The kit provides the complete ISM330IS pin-out 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.



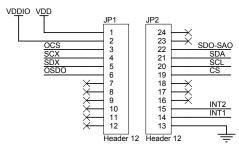
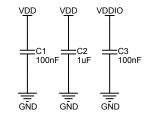
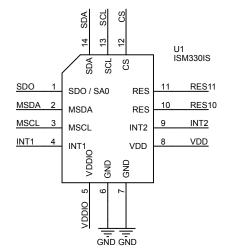
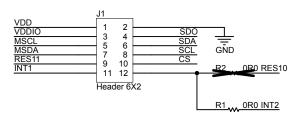


Figure 2. STEVAL-MKI230A circuit schematic









2 Kit versions

Table 1. STEVAL-MKI230KA kit versions

Finished good	Schematic diagrams	Bill of materials
STEVAL\$MKI230KAA (1)	STEVAL\$MKI230KAA schematic diagrams	STEVAL\$MKI230KAA bill of materials

This code identifies the STEVAL-MKI230KA evaluation kit first version. The kit consists of a STEVAL-MKI230AA whose version is identified by the code STEVAL\$MKI230AAA 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
30-Mar-2022	1	Initial release.

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