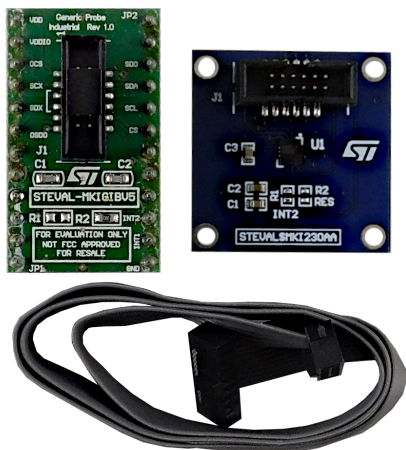


iNEMO inertial module kit based on ISM330IS



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.

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

Schematic diagrams

Figure 1. STEVAL-MKIGIBV5 circuit schematic

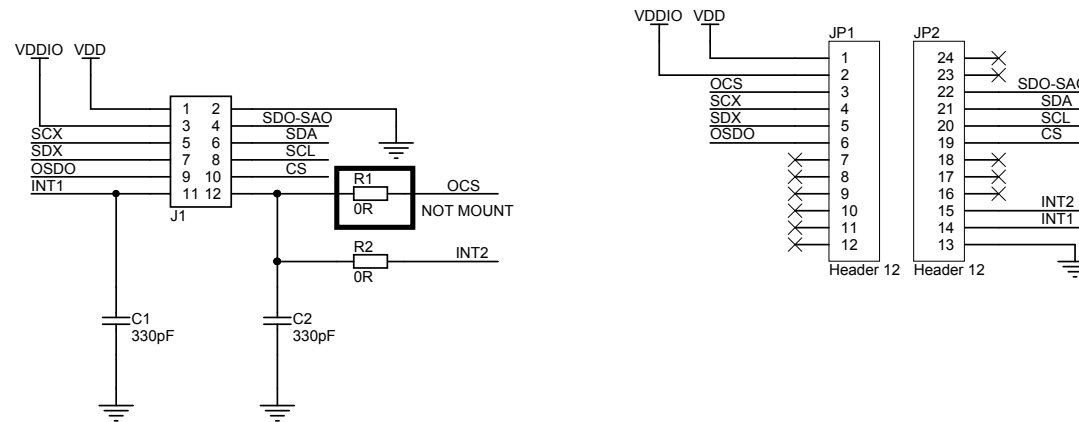
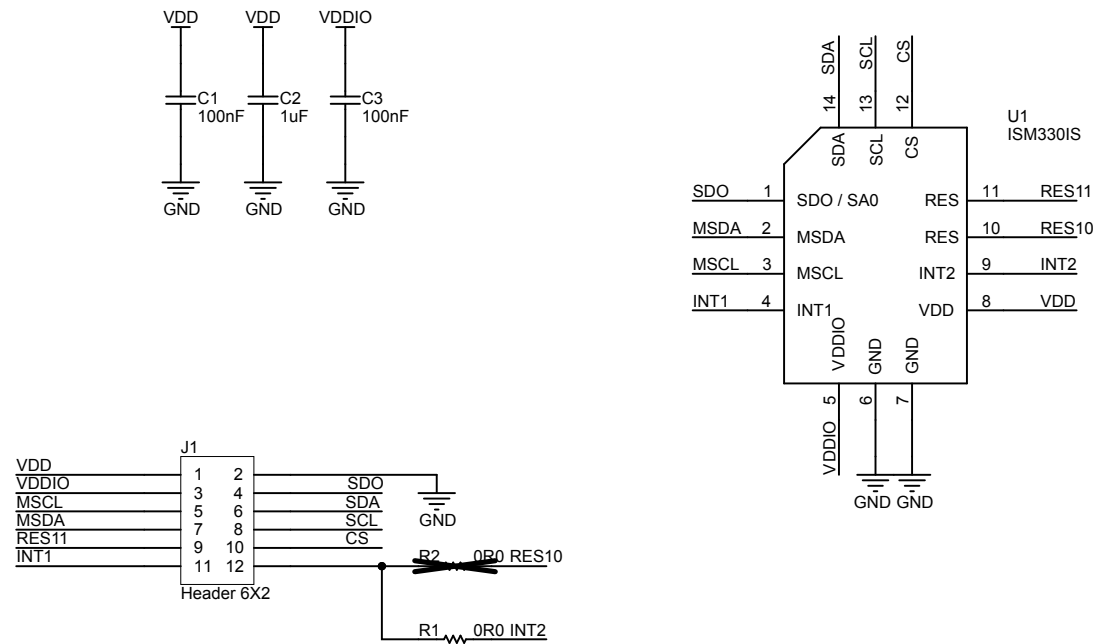


Figure 2. STEVAL-MKI230A circuit schematic



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

1. 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

Revision history

Table 2. Document revision history

Date	Revision	Changes
30-Mar-2022	1	Initial release.

IMPORTANT NOTICE – READ CAREFULLY

STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgment.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of purchasers' products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. For additional information about ST trademarks, refer to www.st.com/trademarks. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2022 STMicroelectronics – All rights reserved

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[STMicroelectronics:](#)

[STEVAL-MKI230KA](#)