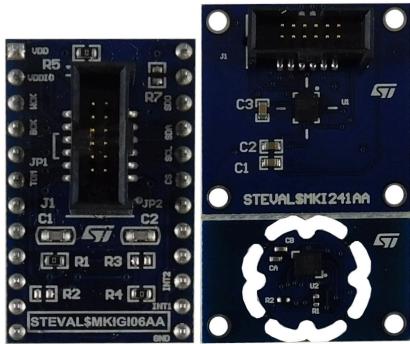


## LSM6DSV16BX adapter kit for standard DIL24 socket with bone conduction functionality



### Features

- User friendly [LSM6DSV16BX](#) board
- Complete [LSM6DSV16BX](#) pinout for a standard DIL 24 socket
- Fully compatible with the [STEVAL-MKI109V3](#) motherboard
- RoHS compliant

### Description

The [STEVAL-MKI241KA](#) evaluation kit is based on an ad hoc PCB, mounting the [LSM6DSV16BX](#) inertial module.

There are two different boards inside [STEVAL-MKI241KA](#). One can be used as a standard application board and a small adapter can be put inside the earphone to verify the bone conduction feature.

Both boards can be connected with the [STEVAL-MKI109V3](#) via [STEVAL-MKIGI06A](#) interface board.

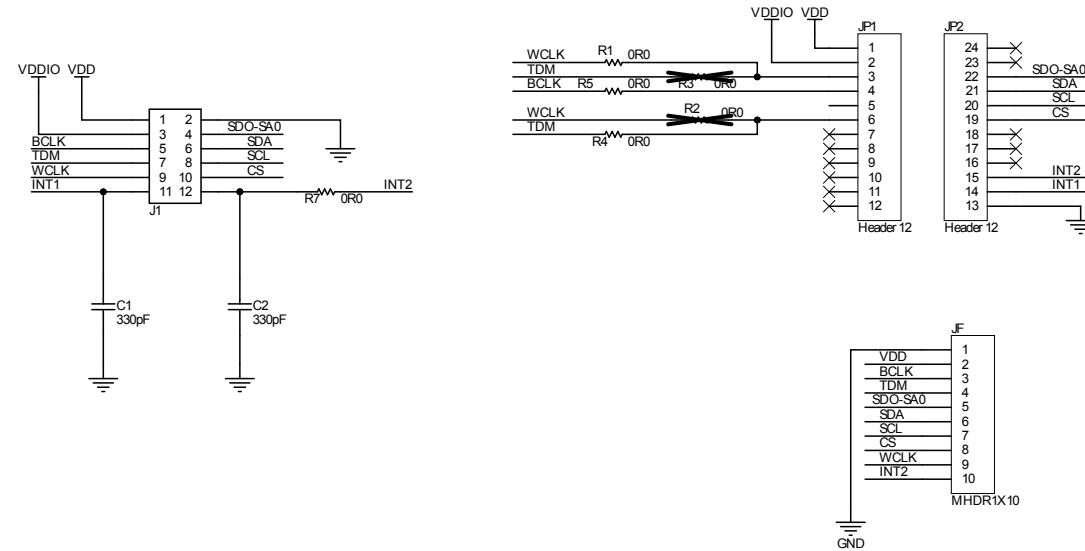
The kit provides the complete [LSM6DSV16BX](#) pinout and comes ready-to-use with the required decoupling capacitors on the  $V_{DD}$  and  $V_{DDIO}$  power supply line.

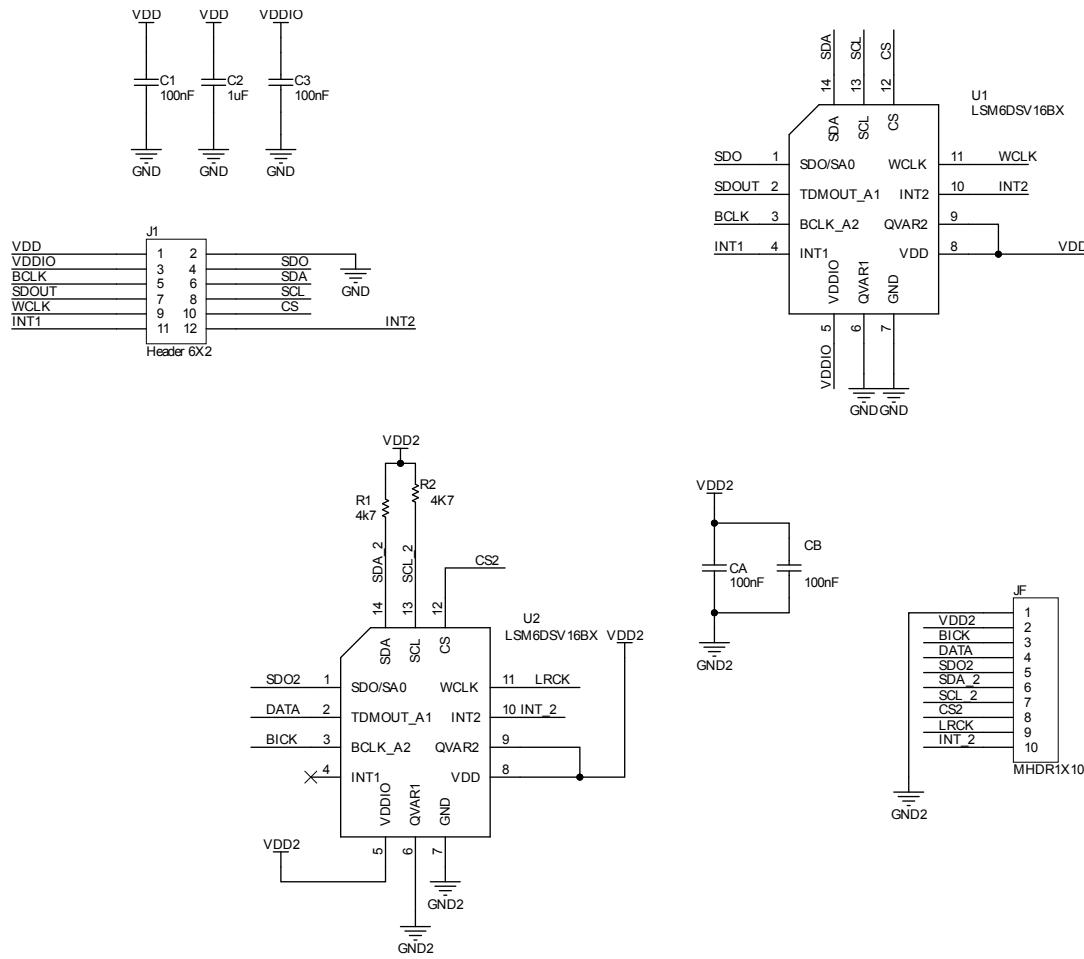
This adapter is supported by the [STEVAL-MKI109V3](#) mother board, which includes a high performance 32-bit microcontroller functioning as a bridge between the sensor and a PC, on which it is possible to use the downloadable graphical user interface ([Unico-GUI](#)), or dedicated software routines for customized applications.

It is also possible to plug the board into an [X-NUCLEO-IKS01A3](#) expansion board.

Product summary	
LSM6DSV16BX adapter kit for standard DIL24 socket with bone conduction functionality	<a href="#">STEVAL-MKI241KA</a>
iNEMO inertial module: 3D accelerometer and 3D gyroscope	<a href="#">LSM6DSV16BXTR</a>
MEMS adapter motherboard based on the STM32F401VE	<a href="#">STEVAL-MKI109V3</a>
Motion MEMS and microphone MEMS expansion board for STM32 Nucleo	<a href="#">X-NUCLEO-IKS01A3</a>
Applications	Smart Glasses (AR)

Figure 1. STEVAL-MKIGI06A circuit schematic



**Figure 2. STEVAL-MKI241A circuit schematic**


## 2 Kit versions

**Table 1. STEVAL-MKI241KA versions**

PCB version	Schematic diagrams	Bill of materials
STEVAL\$MKI241KAA <sup>(1)</sup>	STEVAL\$MKI241KAA schematic diagrams	STEVAL\$MKI241KAA bill of materials

1. *This code identifies the STEVAL-MKI241KA evaluation kit first version. The kit consists of a STEVAL-MKI241A whose version is identified by the code STEVAL\$MKI241AA and a STEVAL-MKIGI06A whose version is identified by the code STEVAL\$MKIGI06AA.*

## Revision history

**Table 2. Document revision history**

Date	Revision	Changes
13-Mar-2023	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](http://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.

© 2023 STMicroelectronics – All rights reserved