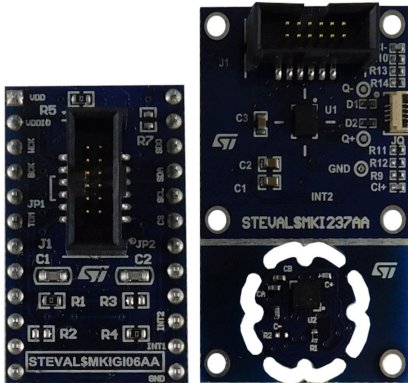


LSM6DSV16BX adapter kit for standard DIL24 socket with QVAR and bone conduction functionalities



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-MKI237KA](#) evaluation kit is based on an ad hoc PCB, mounting the [LSM6DSV16BX](#) inertial module.

There are two different boards inside [STEVAL-MKI237KA](#). 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.

In the kit it is available a small electrode flex connector. This flex can be used as concept of the application.

The kit provides the complete [LSM6DSV16BX](#) 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](#) 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 QVAR and bone conduction functionalities	STEVAL-MKI237KA
iNEMO inertial module: 3D accelerometer and 3D gyroscope	LSM6DSV16BXTR
MEMS adapter motherboard based on the STM32F401VE	STEVAL-MKI109V3
Motion MEMS and microphone MEMS expansion board for STM32 Nucleo	X-NUCLEO-IKS01A3
Applications	Smart Glasses (AR)

1 Schematic diagrams

Figure 1. STEVAL-MKIGI06A circuit schematic

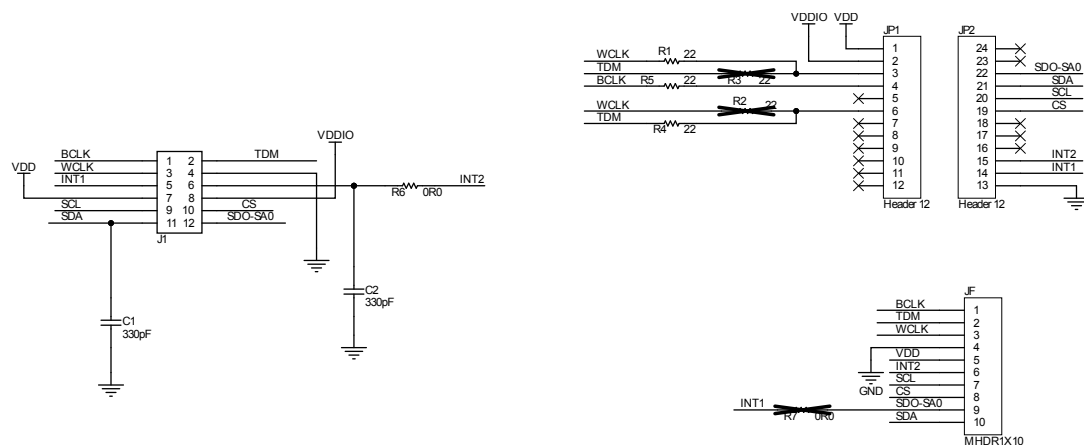
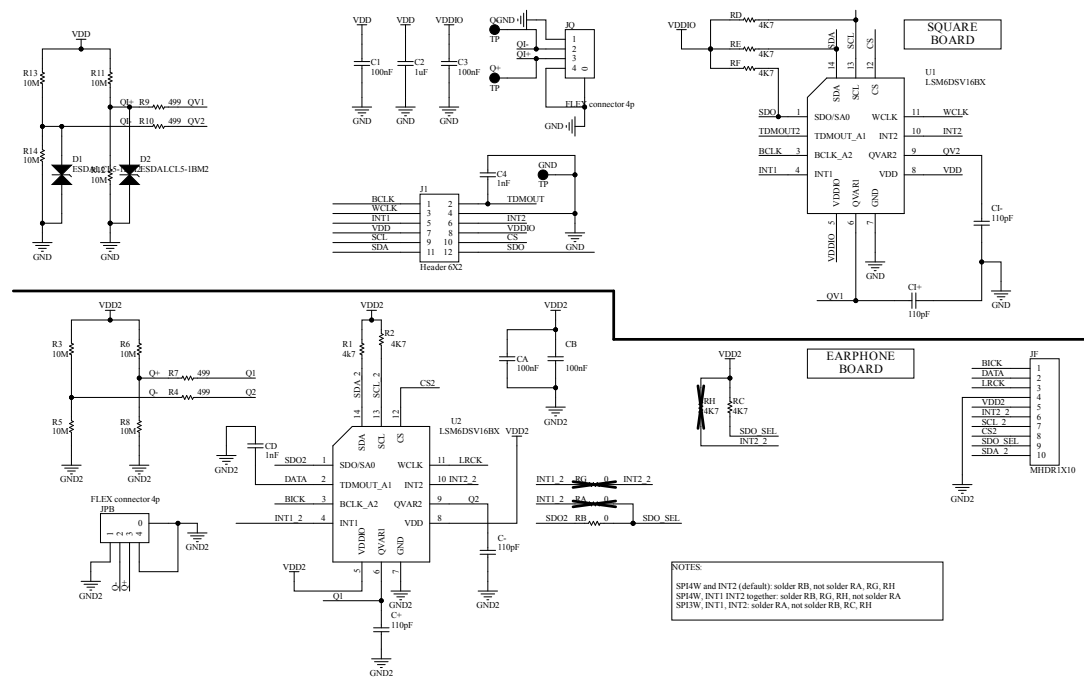


Figure 2. STEVAL-MKI237A circuit schematic



2 Kit versions

Table 1. STEVAL-MKI237KA versions

PCB version	Schematic diagrams	Bill of materials
STEVAL\$MKI237KAA ⁽¹⁾	STEVAL\$MKI237KAA schematic diagrams	STEVAL\$MKI237KAA bill of materials

1. This code identifies the STEVAL-MKI237KA evaluation kit first version. The kit consists of a STEVAL-MKI237A whose version is identified by the code STEVAL\$MKI237AA and a STEVAL-MKIGI06A whose version is identified by the code STEVAL\$MKIGI06AA.

Revision history

Table 2. Document revision history

Date	Revision	Changes
16-Jan-2023	1	Initial release.
07-Sep-2023	2	Updated Section 1 Schematic diagrams .

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