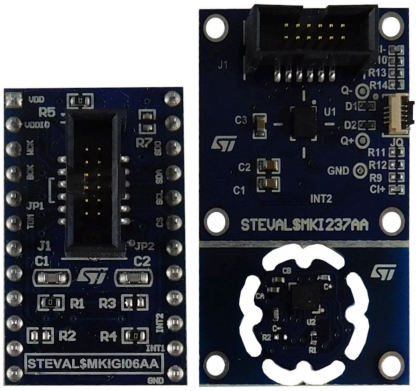
STEVAL-MKI237KA

Data brief

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



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)

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.

1 Schematic diagrams

Figure 1. **STEVAL-MKIGI06A circuit schematic**

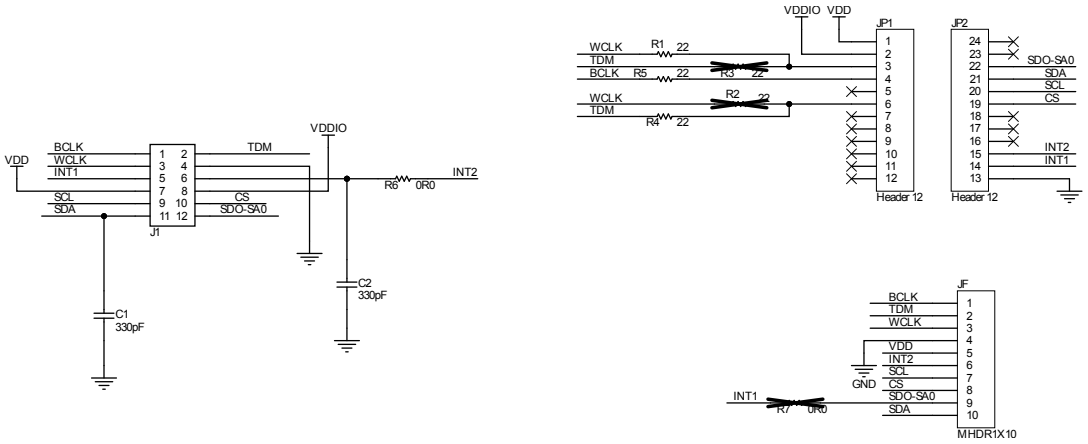
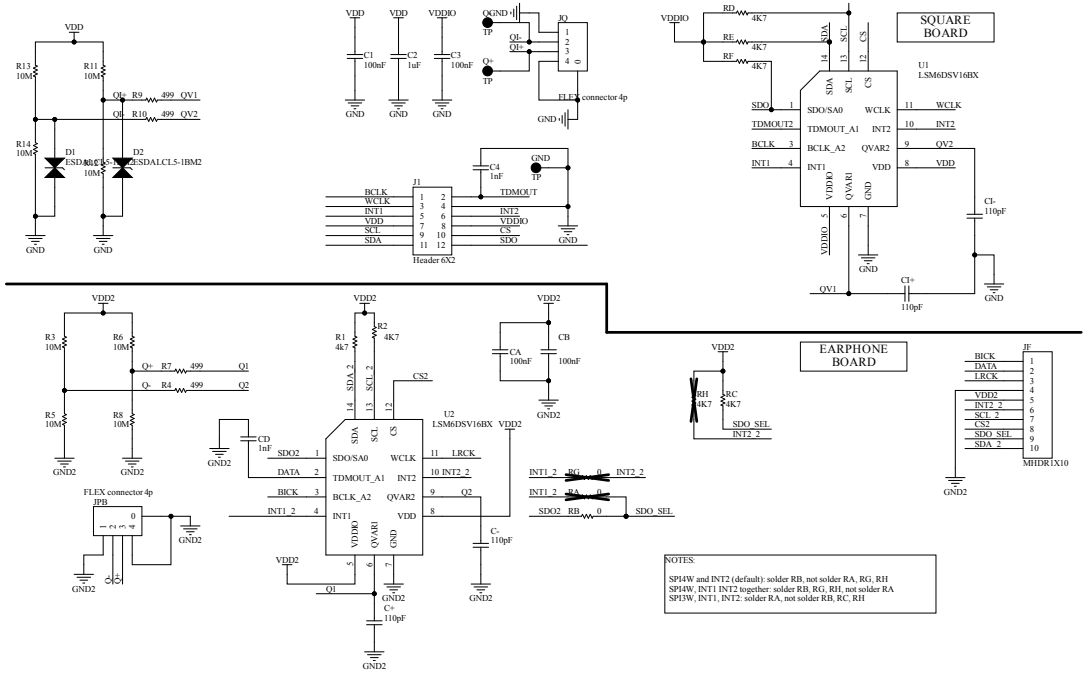


Figure 2. **STEVAL-MKI237A circuit schematic**



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.