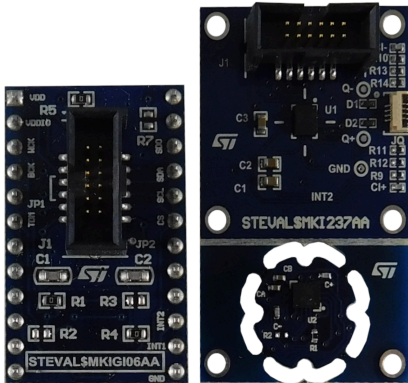


LSM6DSV16BX adapter kit for standard DIL24 socket with QVAR and bone conduction functionalities



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.

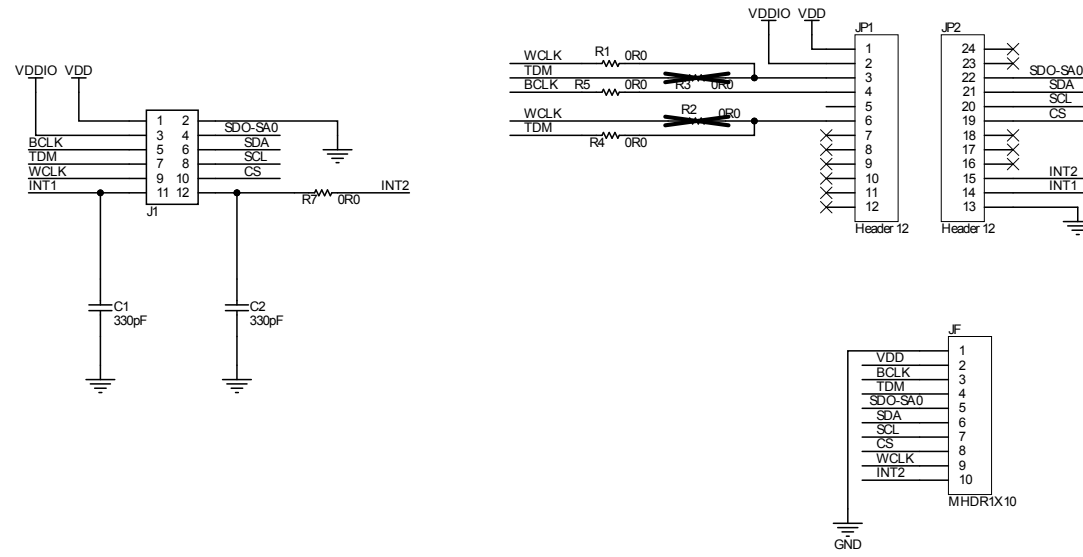
This adapter is supported by the STEVAL-MKI109V3 mother board, which includes a high performance 32-bit microcontroller functioning as a bridge between the sensor and a PC, on which it is possible to use the downloadable graphical user interface (Unico-GUI), or dedicated software routines for customized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



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. |

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