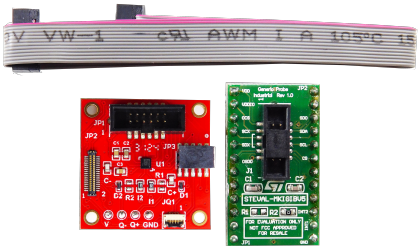
STEVAL-MKI246KA

Data brief

Intelligent ultralow-power accelerometer kit based on IIS2DULPX



Product summary	
Intelligent ultralow-power accelerometer kit based on IIS2DULPX	STEVAL-MKI246KA
Intelligent ultralow-power accelerometer for industrial applications	IIS2DULPXTR
Professional MEMS tool: evaluation board for all ST MEMS sensors	STEVAL-MKI109D
Motion MEMS and microphone MEMS expansion board for STM32 Nucleo	X-NUCLEO-IKS02A1
Application	Industrial robots

Features

- User friendly IIS2DULPX board
- Complete IIS2DULPX pinout for a standard DIL 24 socket
- Fully compatible with STEVAL-MKI109D motherboards
- RoHS compliant

Description

The STEVAL-MKI246KA is an adapter board designed to facilitate the evaluation of theIIS2DULPX 3-axis accelerometer.

The board is connected using a cable to the STEVAL-MKIGIBV5 adapter board to render it compatible with the STEVAL-MKI109D evaluation platform.

The sensor is soldered precisely in the center of the square PCB to conveniently mount the board on the equipment used for vibration analysis through double-sided adhesives. Alternatively, you can mount the board using the holes located in each corner of the PCB.

The STEVAL-MKIGIBV5 can be plugged into a standard DIL-24 socket. The kit provides the complete IIS2DULPX pinout and comes ready to use with the required decoupling capacitors on the VDD power supply line.

This adapter is supported by the STEVAL-MKI109D evaluation platform 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 MEMS Studio graphical user interface, or dedicated software routines for customized applications.

It is also possible to plug the kit on X-NUCLEO-IKS02A1 or STEVAL-STWINBX1 using ad hoc connector mounted on the STEVAL-MKI246A board.

1 Schematic diagrams

Figure 1. **STEVAL-MKIGIBV5 schematic**

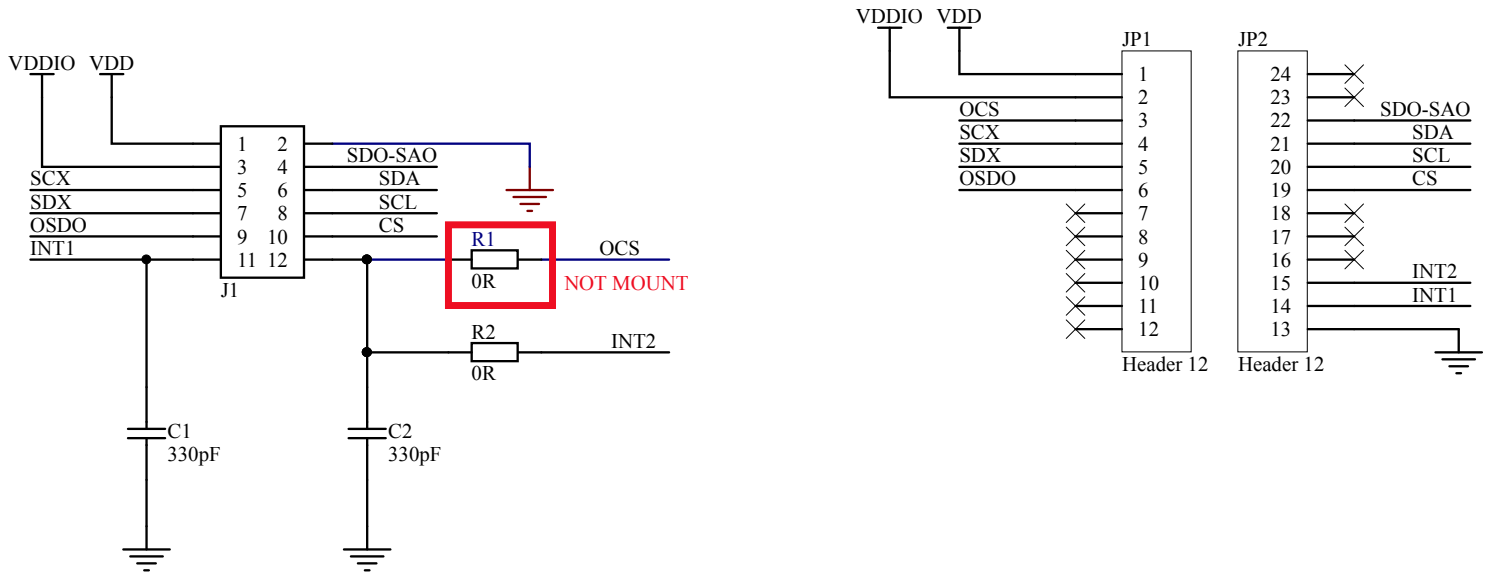
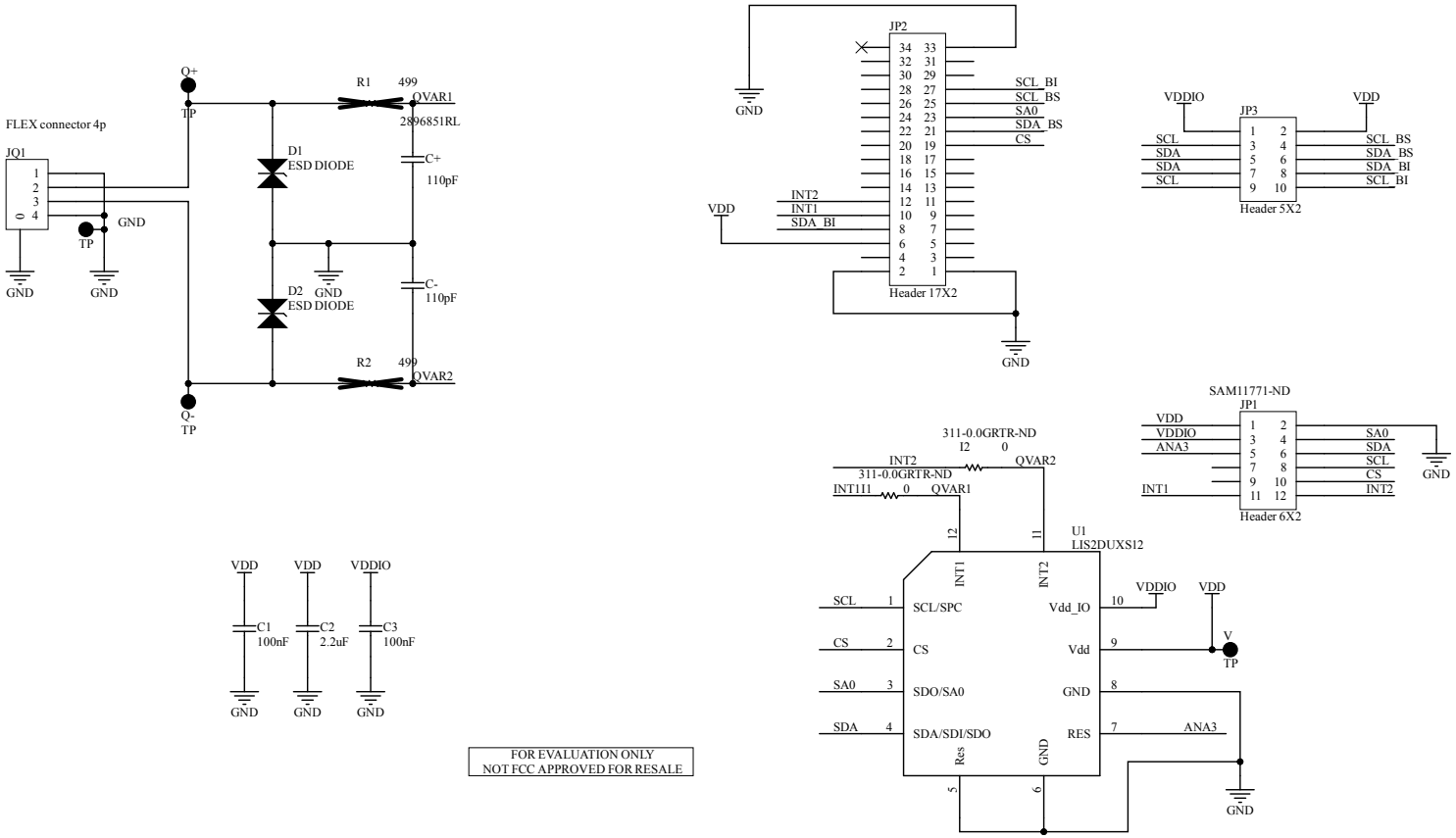


Figure 2. STEVAL-MKI246A schematic



Revision history

Table 1. **Document revision history**

Date	Revision	Changes
13-Feb-2025	1	Initial release.