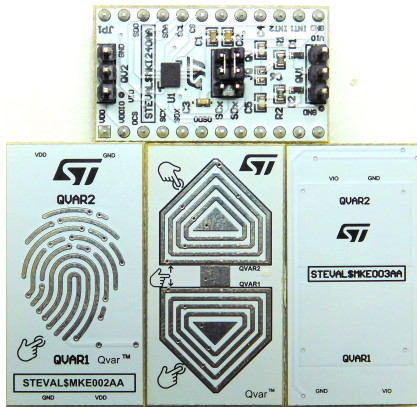


LSM6DSV32X adapter kit for a standard DIL24 socket with Qvar functionalities



Features

- User-friendly [LSM6DSV32X](#) board
- Complete [LSM6DSV32X](#) pinout for a standard DIL24 socket
- Fully compatible with the [STEVAL-MKI109D](#)
- Qvar electrodes
- RoHS compliant

Description

The [STEVAL-MKI240KA](#) evaluation kit is based on the [LSM6DSV32X](#) 6-axis IMU (inertial measurement unit) with a Qvar electrostatic sensor and three different electrodes (swipe, finger, and generic) to make it compatible with the [STEVAL-MKI109D](#).

The kit provides the complete [LSM6DSV32X](#) pinout and comes ready to use with the required decoupling capacitors on the VDD power supply line.

The [STEVAL-MKE00xA](#) can be plugged into the [STEVAL-MKI240KA](#) board.

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 board into X-NUCLEO expansion boards like [X-NUCLEO-IKS4A1](#).

Product summary	
LSM6DSV32X adapter kit for a standard DIL24 socket with Qvar functionalities	STEVAL-MKI240KA
6-axis IMU (inertial measurement unit) with 32 g accelerometer and embedded sensor fusion, AI, Qvar for high-end applications	LSM6DSV32X
Professional MEMS tool: evaluation board for all ST MEMS sensors	STEVAL-MKI109D
Motion MEMS and environmental sensor expansion board for STM32 Nucleo	X-NUCLEO-IKS4A1
Qvar sensing	AN5755
Applications	Augmented reality (AR)

1 Schematic diagrams

Figure 1. STEVAL-MKE001A circuit schematic

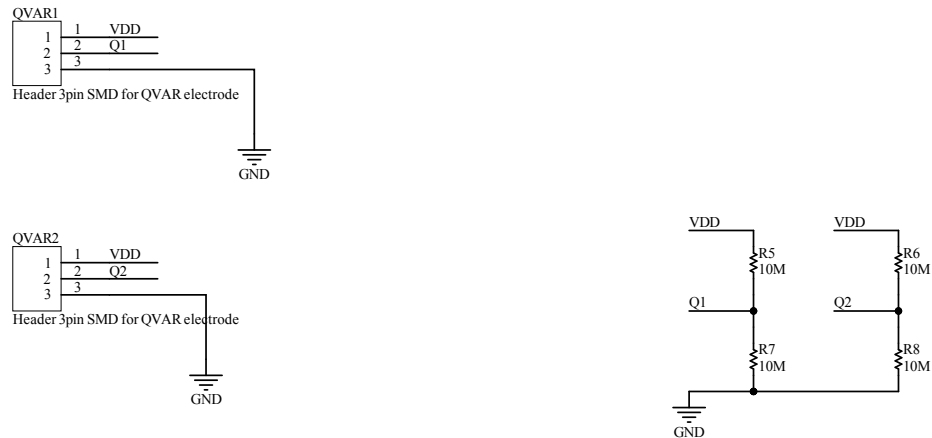


Figure 2. STEVAL-MKE002A circuit schematic

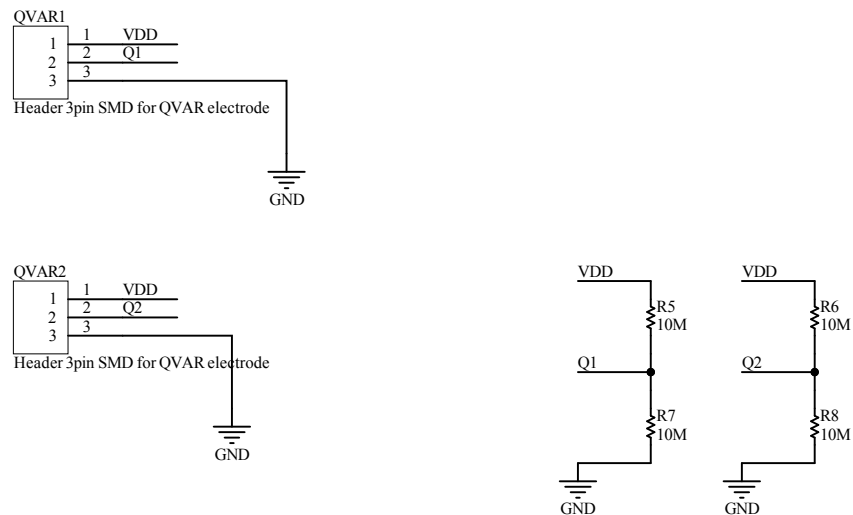
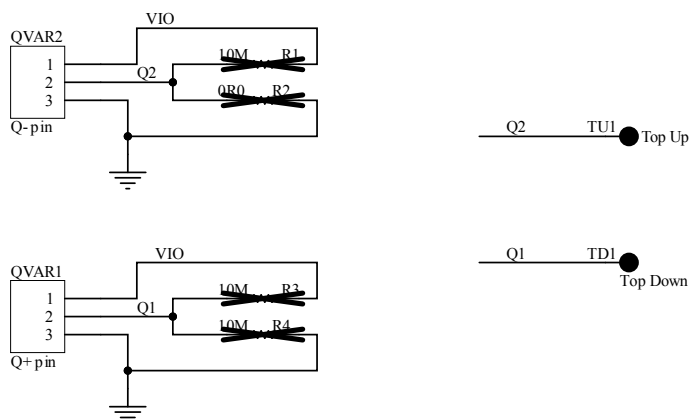
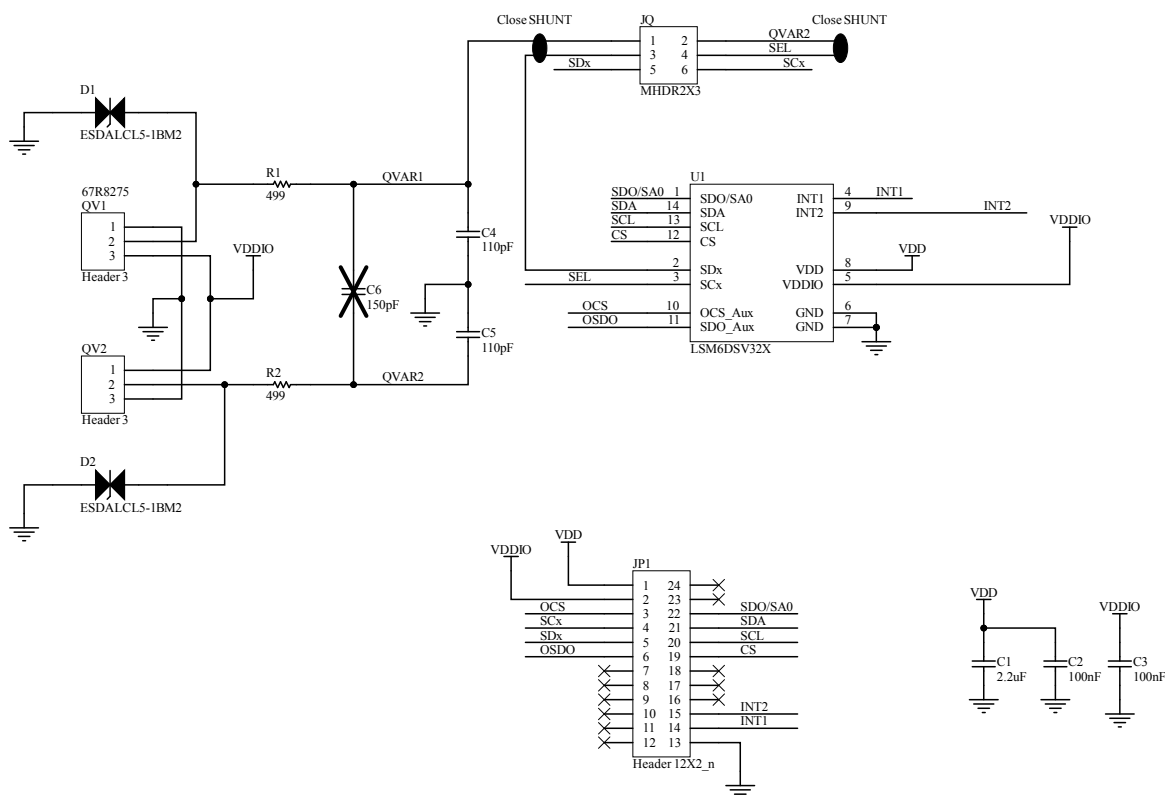


Figure 3. STEVAL-MKE003A circuit schematic

Figure 4. STEVAL-MKI240A circuit schematic


2 Kit versions

Table 1. STEVAL-MKI240KA versions

PCB version	Schematic diagrams	Bill of materials
STEVAL\$MKI240KAA ⁽¹⁾	STEVAL\$MKI240KAA schematic diagrams	STEVAL\$MKI240KAA bill of materials

1. This code identifies the first version of the STEVAL-MKI240KA evaluation kit. The kit consists of STEVAL-MKI240A whose version is identified by the code STEVAL\$MKI240AA, STEVAL-MKE001A whose version is identified by the code STEVAL\$MKE001AA, STEVAL-MKE002A whose version is identified by the code STEVAL\$MKE002AA, and STEVAL-MKE003A whose version is identified by the code STEVAL\$MKE003AA.

Revision history

Table 2. Document revision history

Date	Revision	Changes
05-Mar-2024	1	Initial release
24-Jul-2025	2	Added STEVAL-MKI109D evaluation platform

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