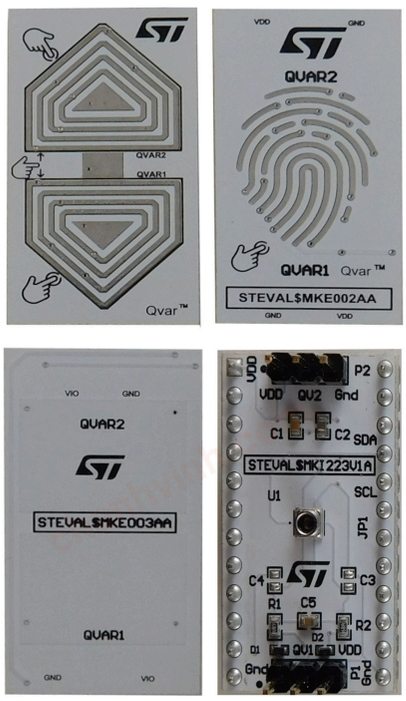
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STEVAL-MKI223V1K

Data brief

Pressure sensor kit with QVAR functionality based on ILPS28QSW



Features

- User friendly ILPS28QSW board
- Complete ILPS28QSW pinout for a standard DIL 24 socket
- Fully compatible with and STEVAL-MKI109V3 motherboards
- RoHS compliant

Description

The STEVAL-MKI223V1K demonstration board is a kit made up of an ad hoc PCB, mounting the ILPS28QSW pressure sensor with a Qvar electrostatic sensor and a swipe electrode to make it compatible with the STEVAL-MKI109V3.

The electrode boards (STEVAL-MKE001A, STEVAL-MKE002A, or STEVAL-MKE003A) can be stacked on a STEVAL-MKI223V1 board. The kit provides the complete ILPS28QSW pinout and comes ready-to-use with the required decoupling capacitors on the V_{DD} power supply line.

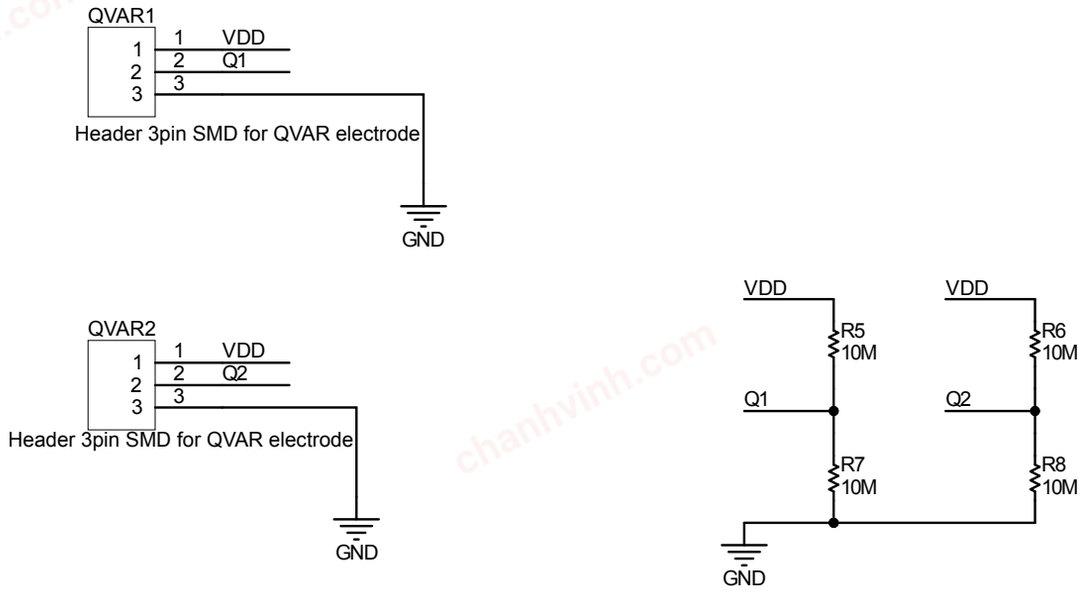
This adapter is supported by the STEVAL-MKI109V3 motherboards which includes a high performance 32-bit microcontroller functioning as a bridge between the sensor and a PC, on which it is possible to use the downloadable graphical user interface (Unico-GUI), or dedicated software routines for customized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

Product summary	
Pressure sensor kit with QVAR functionality based on ILPS28QSW	STEVAL-MKI223V1K
Dual full-scale, 1260 hPa and 4060 hPa, absolute digital output barometer with Qvar detection in a water-resistant package	ILPS28QSW
MEMS adapter motherboard based on the STM32F401VE	STEVAL-MKI109V3
Applications	Gas Metering

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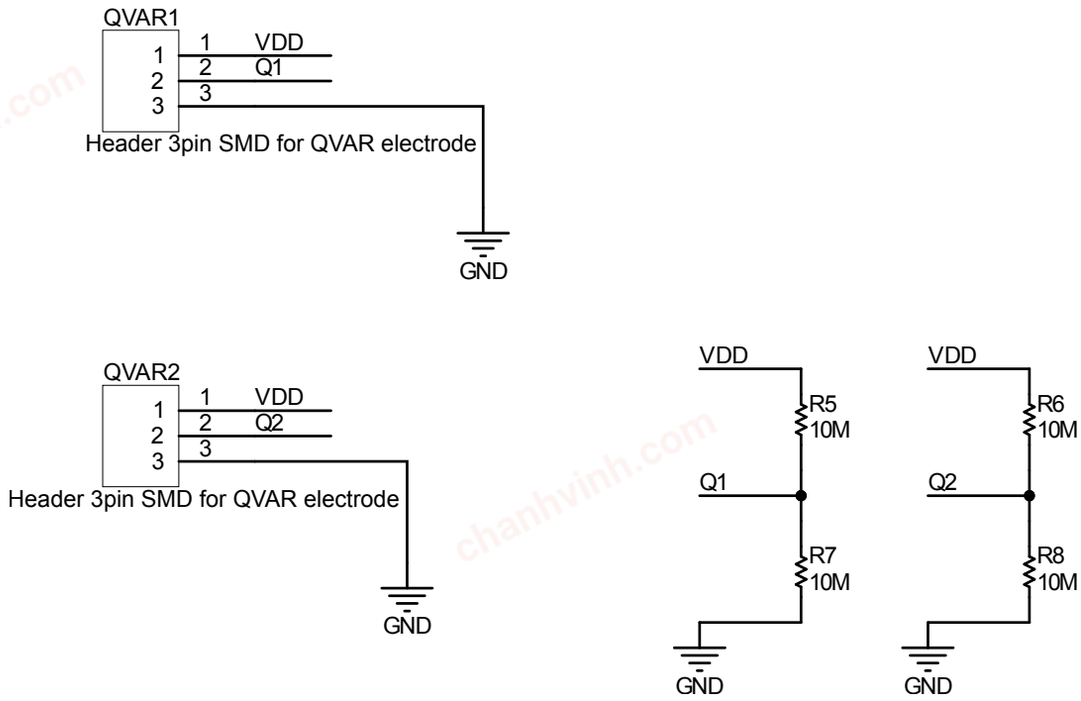
1 Schematic diagrams

Figure 1. **STEVAL-MKE001A circuit schematic**



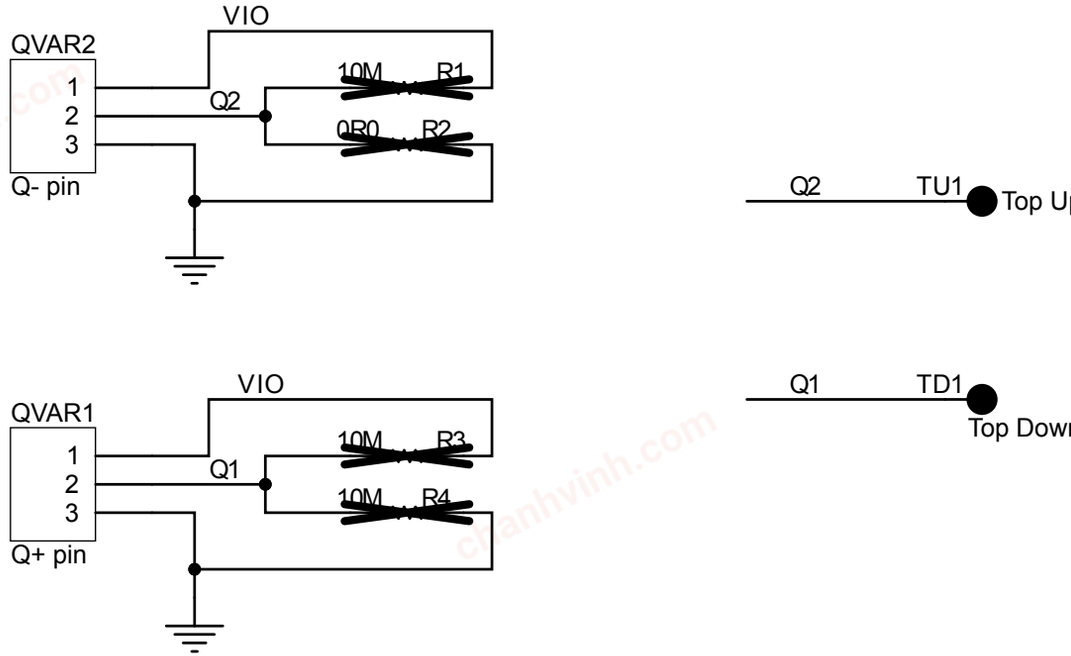
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Figure 2. **STEVAL-MKE002A circuit schematic**



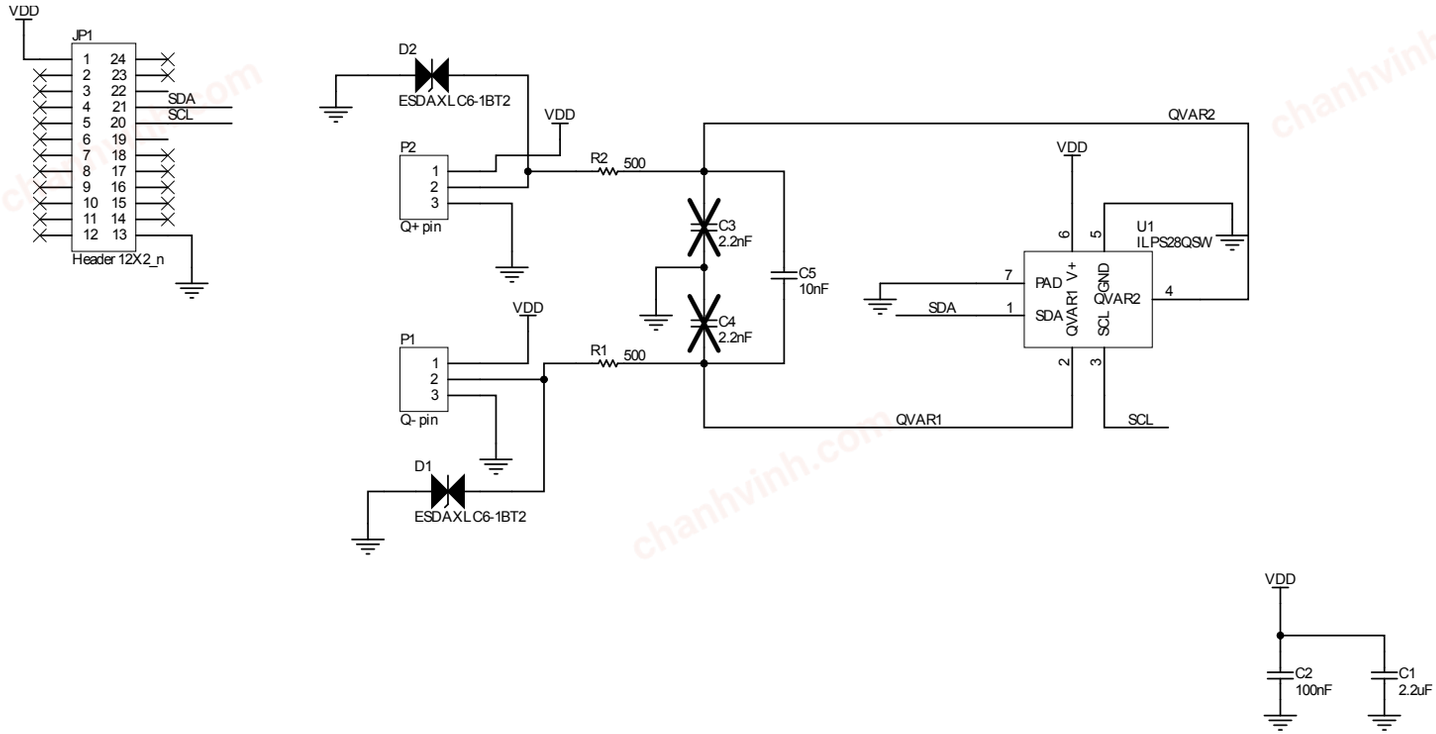
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Figure 3. **STEVAL-MKE003A circuit schematic**



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Figure 4. STEVAL-MKI223V1 circuit schematic



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2 Kit versions

Table 1. STEVAL-MKI223V1K versions

PCB version	Schematic diagrams	Bill of materials
STEVAL$MKI223V1KA (1)	STEVAL$MKI223V1KA schematic diagrams	STEVAL$MKI223V1KA bill of materials

1. *This code identifies the STEVAL-MKI223V1K evaluation kit first version. The kit consists of a STEVAL-MKI223V1 whose version is identified by the code STEVAL$MKI223V1A, a STEVAL-MKE001A whose version is identified by the code STEVAL$MKE001AA, a STEVAL-MKE002A whose version is identified by the code STEVAL$MKE002AA and a STEVAL-MKE003A whose version is identified by the code STEVAL$MKE003AA.*

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Revision history

Table 2. **Document revision history**

Date	Revision	Changes
18-May-2023	1	Initial release.

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