

Data brief

### Pressure sensor kit with Qvar functionality based on ILPS22QS





Product summ	arv	
Froduct Summary		
Pressure sensor kit with QVAR functionality based on ILPS22QS	STEVAL- MKI228KA	
Dual full-scale, 1260 hPa and 4060 hPa, absolute digital output barometer with embedded Qvar electrostatic sensor	ILPS22QS	
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	
Applications	Gas metering	

#### **Features**

- User-friendly ILPS22QS board
- Complete ILPS22QS pinout for a standard DIL24 socket
- Fully compatible with the STEVAL-MKI109D evaluation platform
- · RoHS compliant

### **Description**

The STEVAL-MKI228KA evaluation kit consists of the STEVAL-MKI228A and the STEVAL-MKE001AA.

The STEVAL-MKI228A mounts the ILPS22QS pressure sensor with the Qvar electrostatic sensor and swipe electrode to make it compatible with the STEVAL-MKI109D. The ILPS22QS is soldered exactly in the center of the board.

The STEVAL-MKE001AA can be plugged into a standard DIL24 socket.

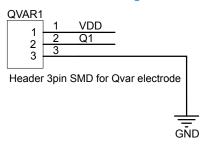
The kit provides the complete ILPS22QS pinout and comes ready to use with the required decoupling capacitors on the VDD power supply line.

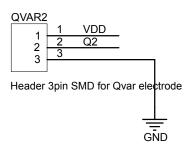
This adapter is supported by the STEVAL-MKI109D evaluation platform, which includes a high-performance 32-bit microcontroller functioning as a bridge between the sensor and a PC, on which it is possible to use the downloadable MEMS Studio graphical user interface or dedicated software routines for customized applications.

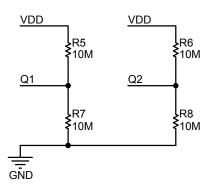
# Schematic diagrams



Figure 1. STEVAL-MKI228KA circuit schematic (1 of 2)

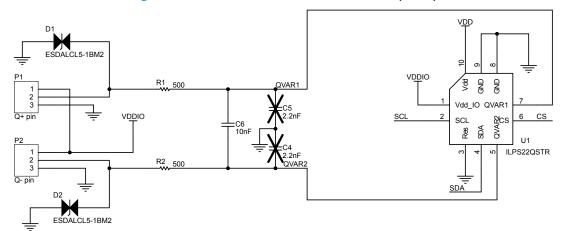


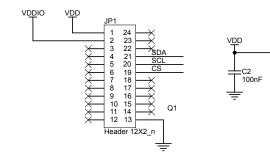




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Figure 2. STEVAL-MKI228KA circuit schematic (2 of 2)







### 2 Kit versions

#### Table 1. STEVAL-MKI228KA kit versions

Finished good	Schematic diagrams	Bill of materials
STEVAL\$MKI228KAA <sup>(1)</sup>	STEVAL\$MKI228KAA schematic diagrams	STEVAL\$MKI228KAA bill of materials

<sup>1.</sup> This code identifies the first version of the STEVAL-MKI228KA evaluation kit. The kit consists of the STEVAL-MKI228A whose version is identified by the code STEVAL\$MKI228AA and the STEVAL-MKE001AA whose version is identified by the code STEVAL\$MKE001AAA

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## **Revision history**

Table 2. Document revision history

Date	Revision	Changes
30-Mar-2022	1	Initial release
05-Jun-2025	2	Added MEMS Studio software solution, STEVAL-MKI109D evaluation platform, and X-NUCLEO-IKS4A1 expansion board

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