



Data brief

Pressure sensor kit with Qvar functionality based on ILPS22QS





Product 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	ILPS22QSTR	
MEMS adapter motherboard based on the STM32F401VE	STEVAL- MKI109V3	
Motion MEMS and microphone MEMS expansion board for STM32 Nucleo	X-NUCLEO- IKS02A1	
Applications	Gas Metering	

Features

- User friendly ILPS22QS board
- Complete ILPS22QS pin-out for a standard DIL24 socket
- Fully compatible with the STEVAL-MKI109V3 motherboard
- RoHS compliant

Description

The STEVAL-MKI228KA evaluation kit consists of the STEVAL-MKI228A and the STREVAL-MKE001A.

The STEVAL-MKI228A mounts the ILPS22QS pressure sensor with the Qvar electrostatic sensor and swipe electrode to make it compatible with the STEVAL-MKI109V3. The ILPS22QS is soldered exactly at the board center.

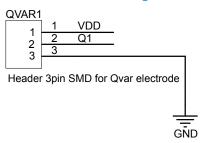
The STEVAL-MKE001AA can be plugged into a standard DIL24 socket.

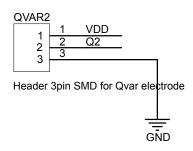
The kit provides the complete ILPS22QS pin-out and comes ready-to-use with the required decoupling capacitors on the VDD power supply line.

This adapter is supported by the STEVAL-MKI109V3 motherboard, 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 a downloadable graphical user interface (Unico-GUI), or dedicated software routines for customized applications.

Schematic diagrams

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





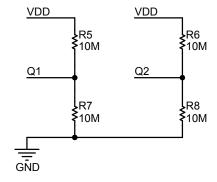
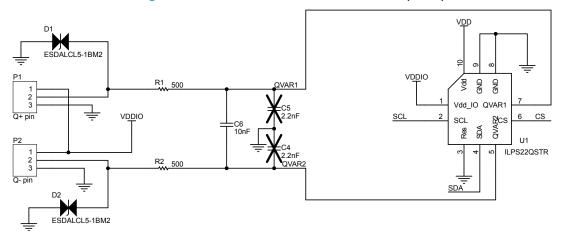
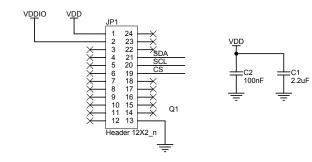






Figure 2. STEVAL-MKI228KA circuit schematic (2 of 2)





VDDIO

C3 100nF



2 Kit versions

Table 1. STEVAL-MKI228KA kit versions

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

This code identifies the STEVAL-MKI228KA evaluation kit first version. The kit consists of a STEVAL-MKI228A whose version is identified by the code STEVAL\$MKI228AA and a 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.

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