UM0532
User manual

STEVAL-MKI020V1
adapter board for the LIS302SG

Introduction

The STEVAL-MKI020V1 is an adapter board designed to facilitate the evaluation of the LIS302SG three-axis analog output linear accelerometer. The board offers an effective solution for fast system prototyping and device evaluation directly within the user's own application.

The STEVAL-MKI020V1can be plugged into a standard DIL 24 socket. The adapter provides the complete LIS302SG pinout and comes ready-to-use with the required decoupling capacitors on the Vdd power supply line.

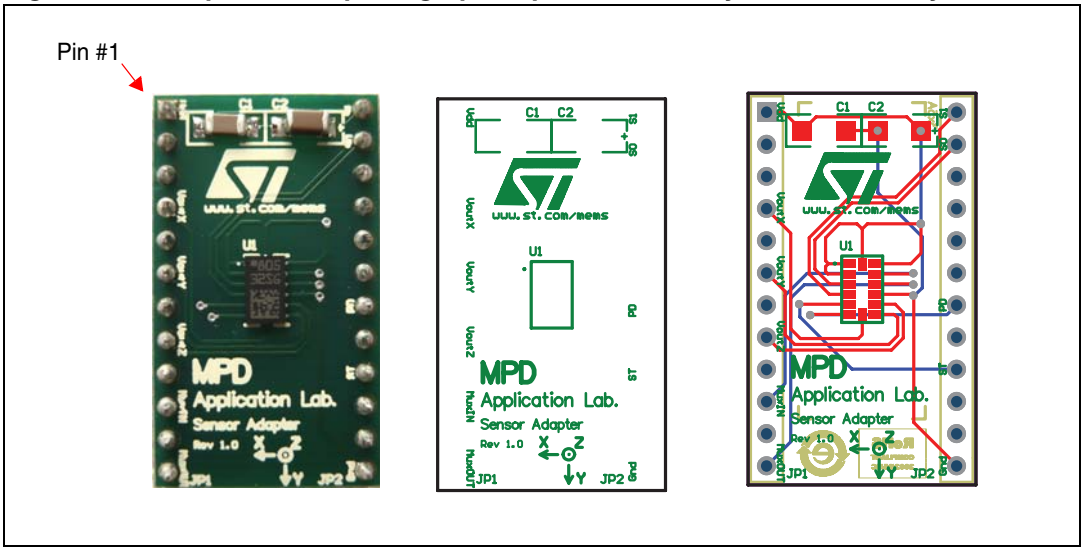
The pinout of the adapter is fully compatible with all other available adapter boards, making it possible to switch from one sensor to another easily during device evaluation without the need for board redesign.

This user manual provides information on the STEVAL-MKI020V1 only. For details regarding the LIS302SG specifications, please refer to the datasheet for the device.

1 Adapter board layout and pin description

A photograph of the adapter board is shown in *Figure 1*, together with an illustration of the top silk-screen layer and the board layout.

Figure 1. Adapter board photograph, top silk-screen layer and board layout



In addition to the MEMS sensor, the adapter board includes two filtering capacitors (10 µF and 100 nF, respectively) on the analog Vdd power supply line.

The pin description of the STEVAL-MKI020V1 is provided in *Table 1*.

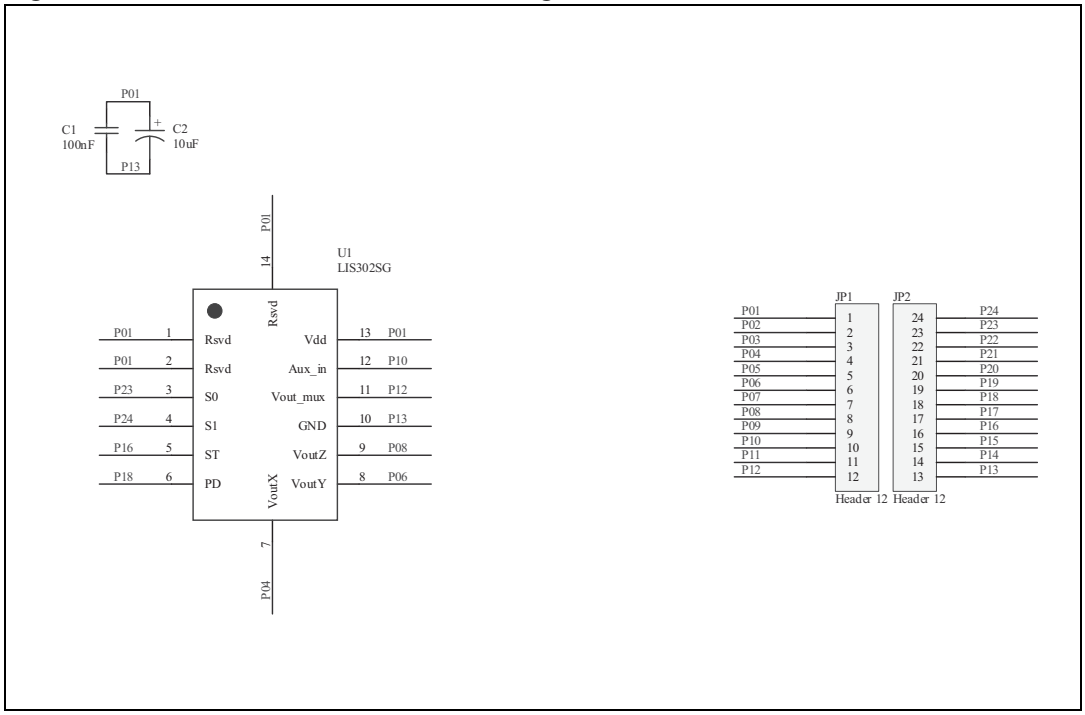
Table 1. STEVAL-MKI020V1 pin description

Adapter board pin #	Pin name	Function
1	Vdd	Power supply
2-3, 5, 7, 9-12, 14-15, 17-24	NC	Not connected
4	Voutx	Output voltage X channel
6	Vouty	Output voltage Y channel
8	Voutz	Output voltage Z channel
13	GND	0V supply
16	ST	Self-test (logic 0: normal mode; logic 1: self-test)
18	PD	Power-down (logic 0: normal mode; logic 1: self-test)

For additional information regarding the use of the STEVAL-MKI020V1 3-axis accelerometer, please refer to the device datasheet.

2 Schematic and connection diagram

Figure 2. Schematic and connection diagram for the STEVAL-MKI020V1



3 Revision history

Table 2. Document revision history

Date	Revision	Changes
24-June-2008	1	Initial release.

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