

STEVAL-MKI021V1

MEMS 3-axis ± 2g analog-output demonstration board based on the nano accelerometer LIS331AL

Data brief

Features

- 3-axis, ±2g motion sensor with analog output
- embedded self-test
- high shock survivability (up to 10000g per 0.1 sec)
- RoHS compliant

Description

The STEVAL-MKI021V1 demonstration board is designed to provide the user with a complete, ready-to-use platform for the evaluation of the LIS331AL.

The LIS331AL is the smallest consumer lowpower 3-axis linear capacitive accelerometer. It includes a sensing element and an IC interface capable of taking information from the sensing element and providing an analog signal to an external application.

In addition to the MEMS sensor, the system includes a linear voltage regulator and a rail-to-rail low-noise quad amplifier configured as a noninverting buffer, making both direct sensor outputs and buffered sensor outputs available to the user.

The STEVAL-MKI021V1 also provides an easy mean of controlling the power-down and self-test pins.



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For further information contact your local STMicroelectronics sales office.

Circuit schematic 1



Figure 1. Demonstration board schematic and connection diagram

Doc ID 18300 Rev 1

2 Revision history

Table 1.Document revision history

| Date | Revision | Changes |
|-------------|----------|------------------|
| 23-Feb-2011 | 1 | Initial release. |



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