



# STEVAL-MKI024V1

MEMS 3-axis  $\pm 2g$  /  $\pm 8g$  smart digital output demonstration board based on the "nano" accelerometer LIS331DL

Data brief

## Features

- Graphical user interface
- Mini USB connector
- Control switches
- MEMS sensor
- LED indicators
- ST72F65x - USB microcontroller

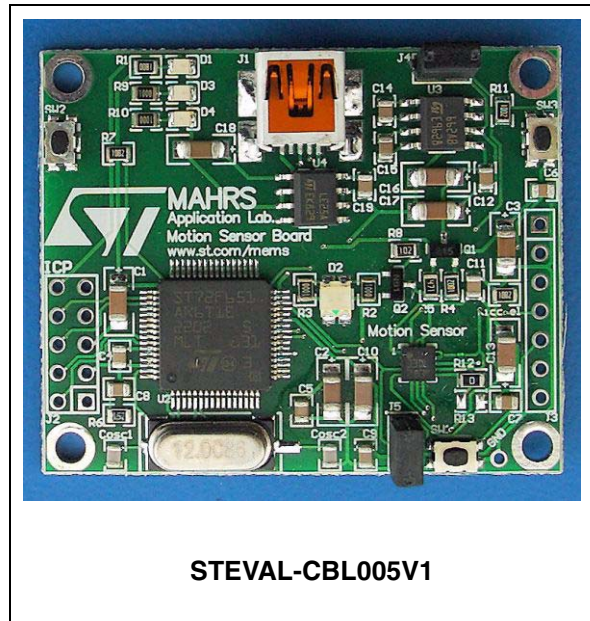
## Description

The STEVAL-MKI024V1 is a demonstration board designed to provide the user with a complete, ready-to-use platform for evaluation of the LIS331DL, the new MEMS belonging to the "nano" family of ST motion sensors.

The LIS331DL is the smallest consumer low power three axes linear accelerometer and it features digital I2C/SPI serial interface standard output, smart embedded functions, it has dynamically user selectable full scales of  $\pm 2g$  /  $\pm 8g$  and it is capable of measuring accelerations with an output data rate of 100 Hz or 400 Hz.

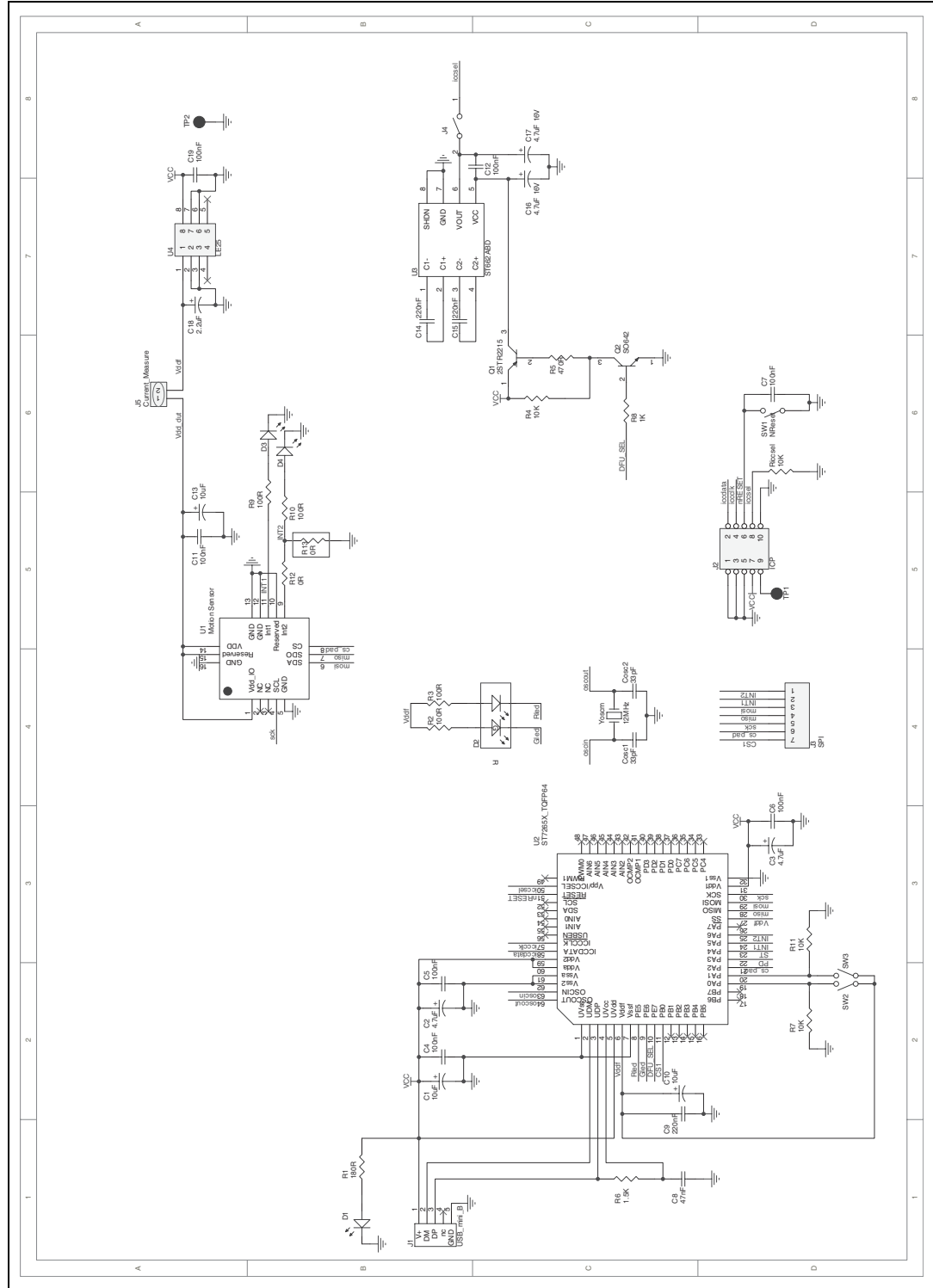
The device may be configured to generate inertial wake-up/free-fall interrupt signals when a programmable acceleration threshold is crossed at least in one of the three axes. Thresholds and timing of interrupt generators are programmable by the end user.

In addition to the MEMS sensor, the demonstration board utilizes an ST72F65x - USB microcontroller which functions as a bridge between the sensor and the PC, on which it is possible to use the graphical user interface (GUI) included with the kit or dedicated software routines for customized applications.



# 1 Circuit schematic

Figure 1. Schematic diagram



## 2 Revision history

**Table 1. Document revision history**

Date	Revision	Changes
06-Apr-2009	1	Initial release.

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