

## STEVAL-MKI022V1

MEMS 3-axis ±2g /±4g /±8g smart digital output demonstration board based on nano accelerometer LIS331DLH

Data brief

### **Features**

- Powered directly from USB connector
- I<sup>2</sup>C/SPI digital output interface
- Sleep to wake-up function
- 6D orientation detection
- Graphical user interface (GUI)
- Both the hardware and software that compose the STEVAL-MKI022V1 demonstration kit have been designed to operate with Microsoft<sup>®</sup> Windows XP
- RoHS compliant

### **Description**

The STEVAL-MKI022V1 demonstration board is designed to provide the user with a complete, ready-to-use platform for demonstration of the LIS331DLH. The LIS331DLH is a low-power 3-axis linear accelerometer with digital output. The device includes a sensing element and an IC interface capable of translating information from the sensing element into a measured signal that can be used for external applications.

In addition to the MEMS sensor, the demonstration board uses an ST7-USB microcontroller that functions as a bridge between the sensor and the PC. The microcontroller may be used for the GUI which is downloadable from the ST website, or for dedicated software routines for customized applications.

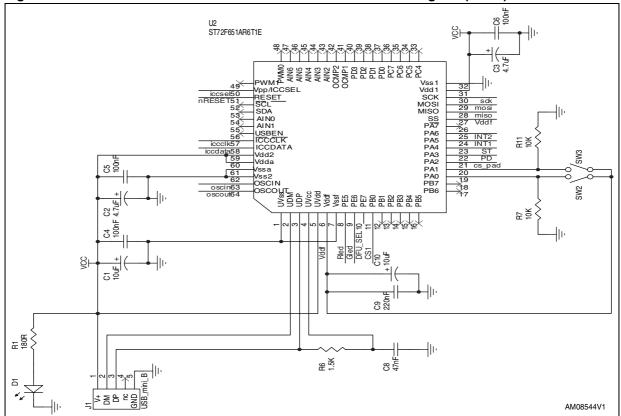


STEVAL-MKI022V1

Circuit schematic STEVAL-MKI022V1

# 1 Circuit schematic

Figure 1. STEVAL-MKI022V1 demonstration board schematic diagram (1 of 2)



STEVAL-MKI022V1 Circuit schematic

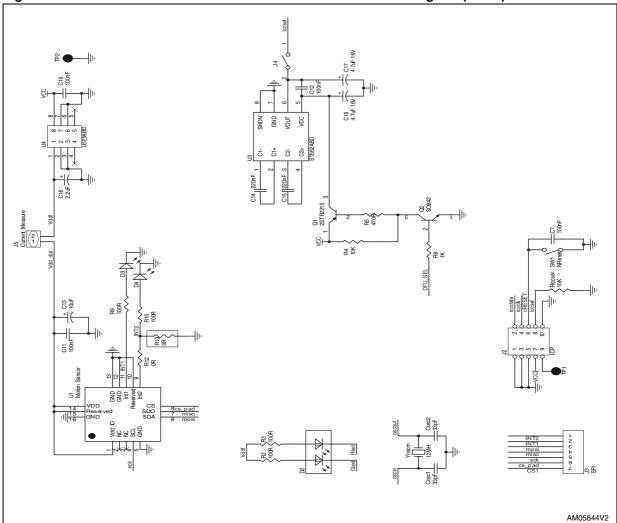


Figure 2. STEVAL-MKI022V1 demonstration board schematic diagram (2 of 2)

Revision history STEVAL-MKI022V1

# 2 Revision history

Table 1. Document revision history

Date	Revision	Changes
19-Nov-2010	1	Initial release.

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