



## STEVAL-MKI022V1

MEMS 3-axis  $\pm 2g$  /  $\pm 4g$  /  $\pm 8g$  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® 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.



# 1 Circuit schematic

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

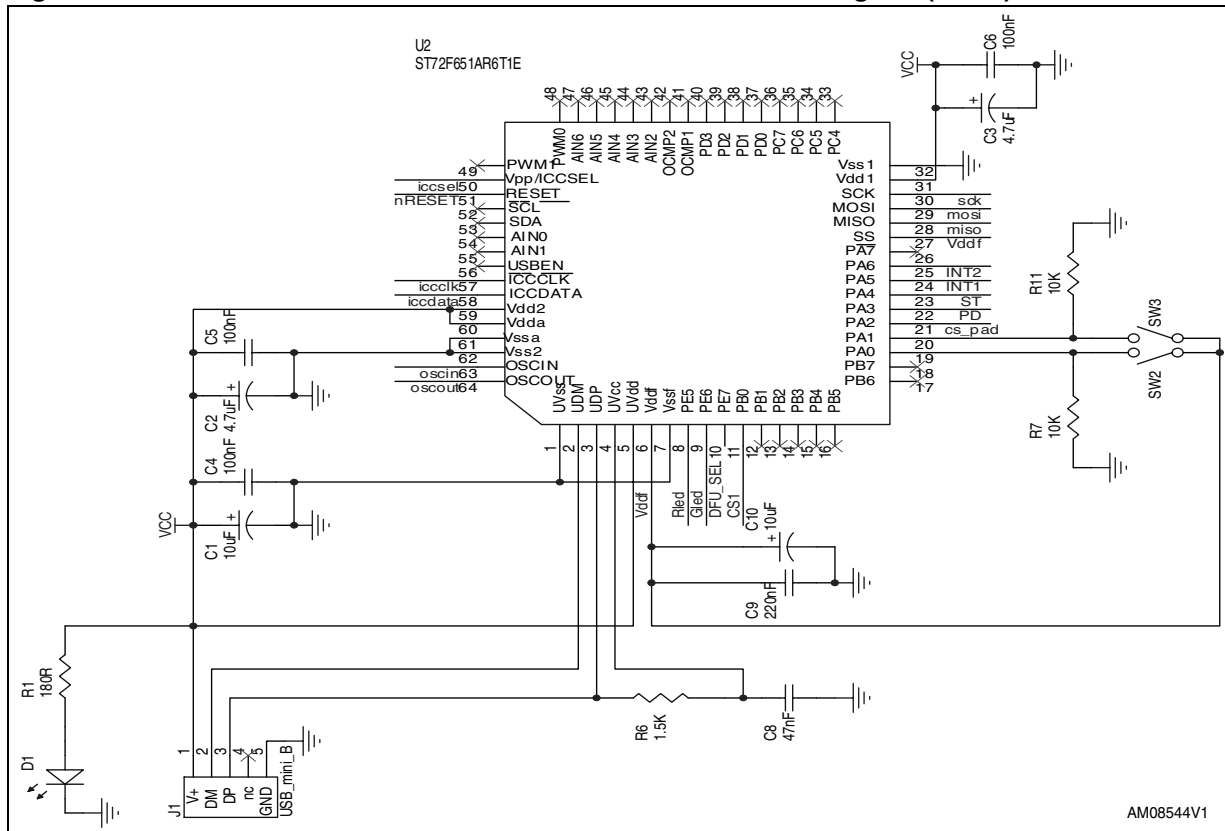
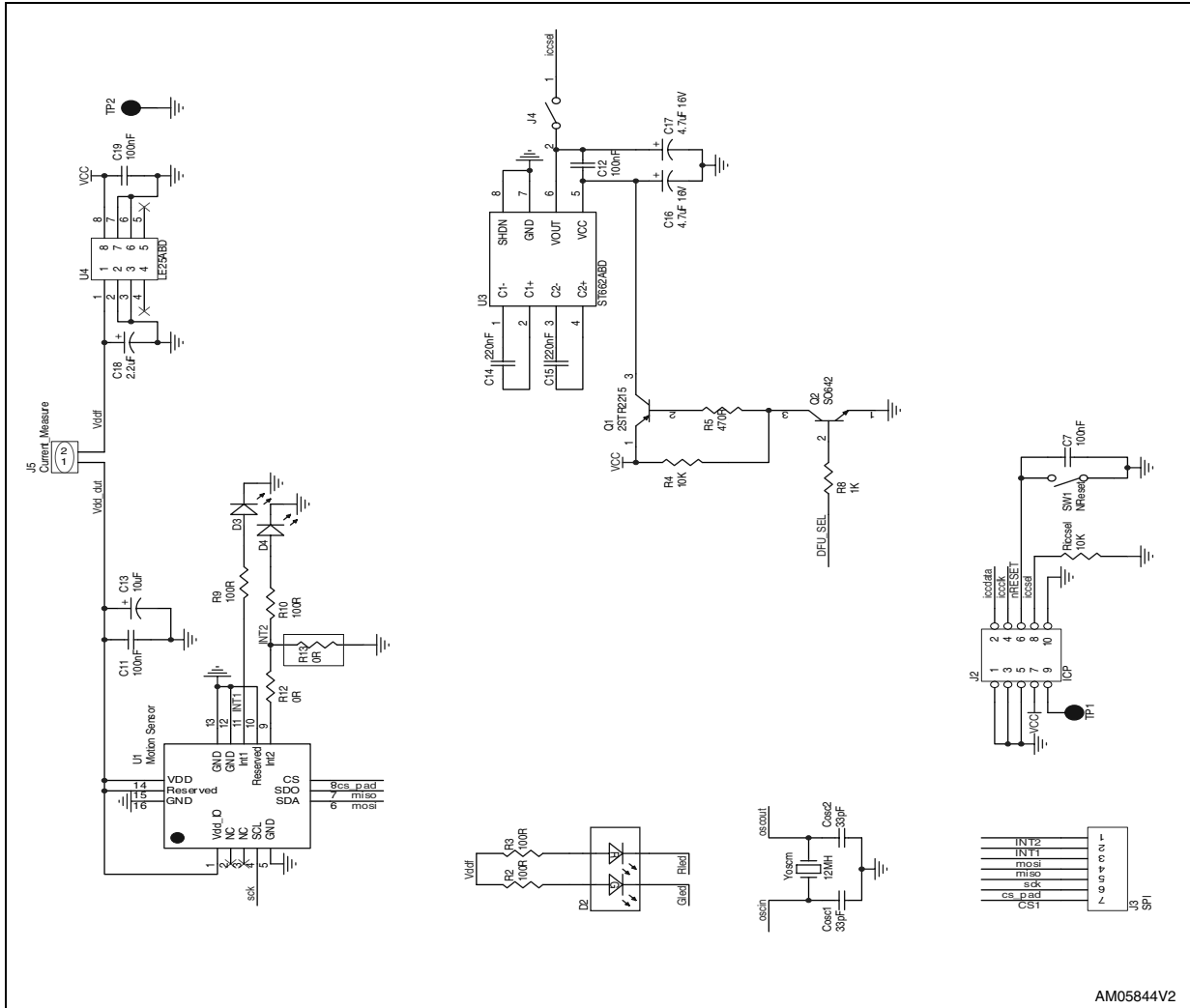


Figure 2. STEVAL-MKI022V1 demonstration board schematic diagram (2 of 2)



AM05844V2

## 2 Revision history

**Table 1. Document revision history**

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

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