



# STEVAL-MKI078V1

## MEMS demonstration board based on the LPR450AL analog output dual-axis gyroscope

Data brief

### Features

- Two working modes:
  - analog (AWM)
  - digital (DWM)
- RoHS compliant

### Description

The STEVAL-MKI078V1 is a demonstration board designed to provide the user with a complete, ready-to-use platform for demonstration of ST MEMS devices in the LPR450AL product family.

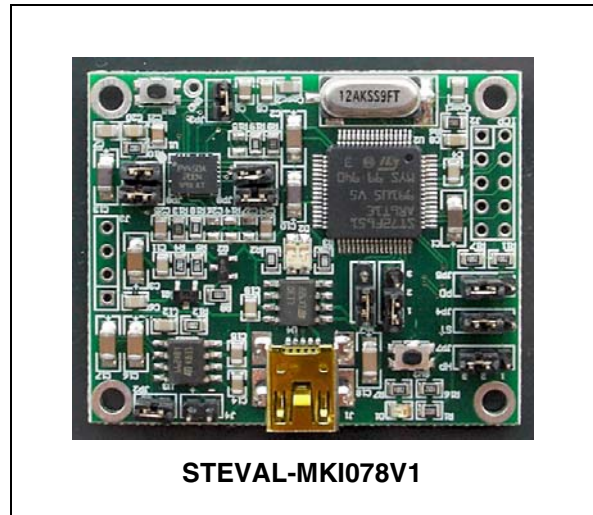
The kit includes a sensing element and an IC interface capable of translating information from the sensing element into a measured signal that can be used for external applications.

In addition to the MEMS sensor, the demonstration board uses an ST7 microcontroller which functions as a bridge between the sensor and the PC. This makes it possible to download the graphical user interface (GUI) from the website or to use dedicated software routines for customized applications.

The STEVAL-MKI078V1 demonstration board has been designed for use in two different working modes: analog and digital.

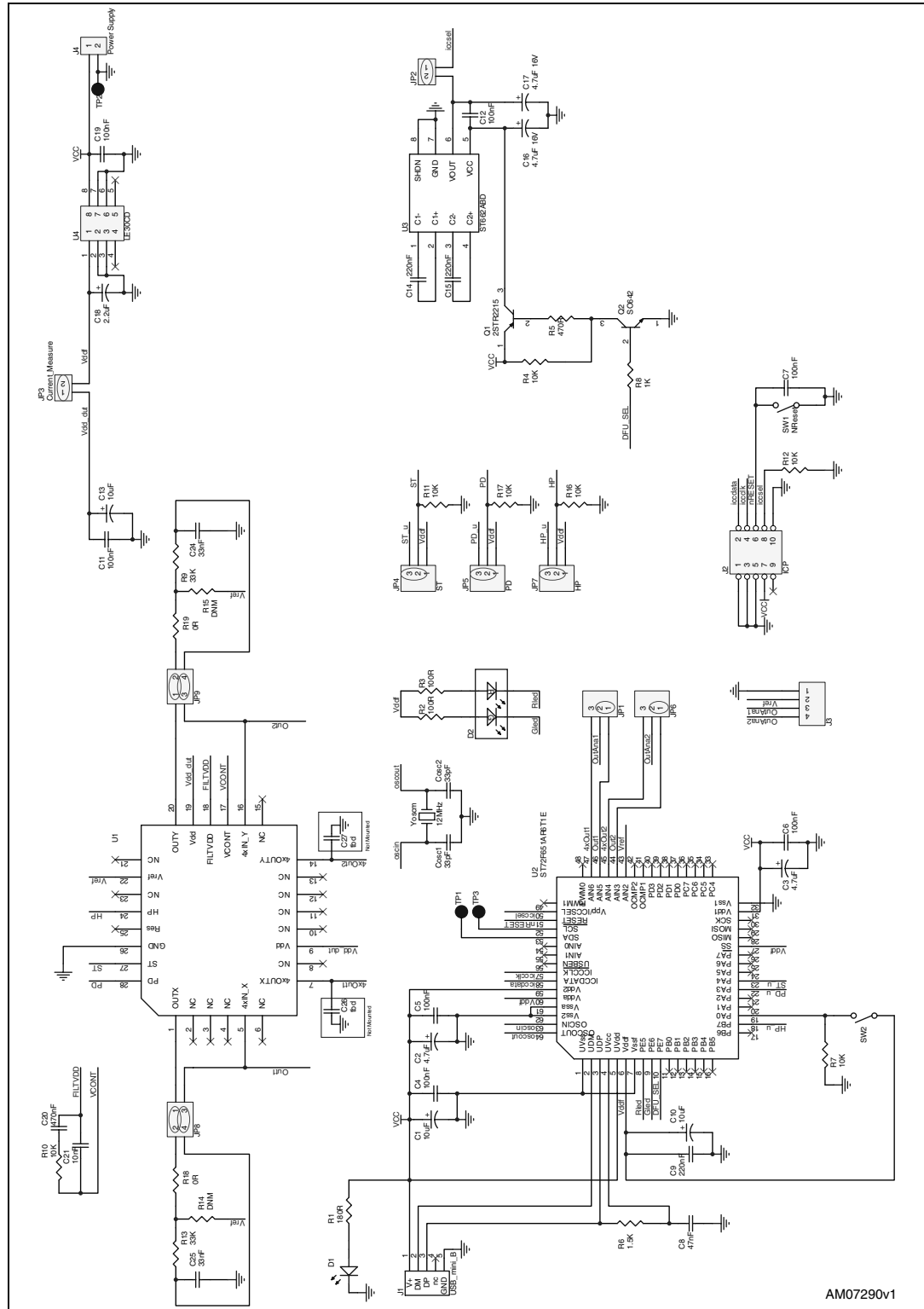
In analog working mode (AWM) the microcontroller on the board is disabled and the analog outputs of the device are available to the user on a dedicated connector. This is the default working mode when the power supply is applied either through the USB connector or through the supply connector.

In digital working mode (DWM), the microcontroller on the board is enabled and allows the user to digitally acquire the output signals of the device, to see them on the PC through the dedicated GUI, and to control the control pins of the device.



# 1 Schematic diagram

Figure 1. STEVAL-MKI078V1 circuit schematic



AM07290v1



## 2 Revision history

Table 1. Document revision history

Date	Revision	Changes
12-Aug-2010	1	Initial release.

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