



# STEVAL-MKI041V1

MEMS analog output demonstration board for the LY550ALH,  $\pm 500^\circ/\text{s}$  and  $\pm 2000^\circ/\text{s}$ , dual-axis pitch and yaw gyroscope

Data brief

## Features

- Two different working modes:
  - Analog working mode (AWM)
  - Digital working mode (DWM)
- RoHS compliant

## Description

The STEVAL-MKI041V1 is a demonstration board designed to provide the user with a complete, ready-to-use platform for demonstration of the LY550ALH product family.

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 utilizes an ST7-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) available from the ST website, or to use dedicated software routines for customized applications.

The STEVAL-MKI041V1 demonstration board is designed to be used in two different working modes: analog working mode and digital working mode.

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 the dedicated connector.

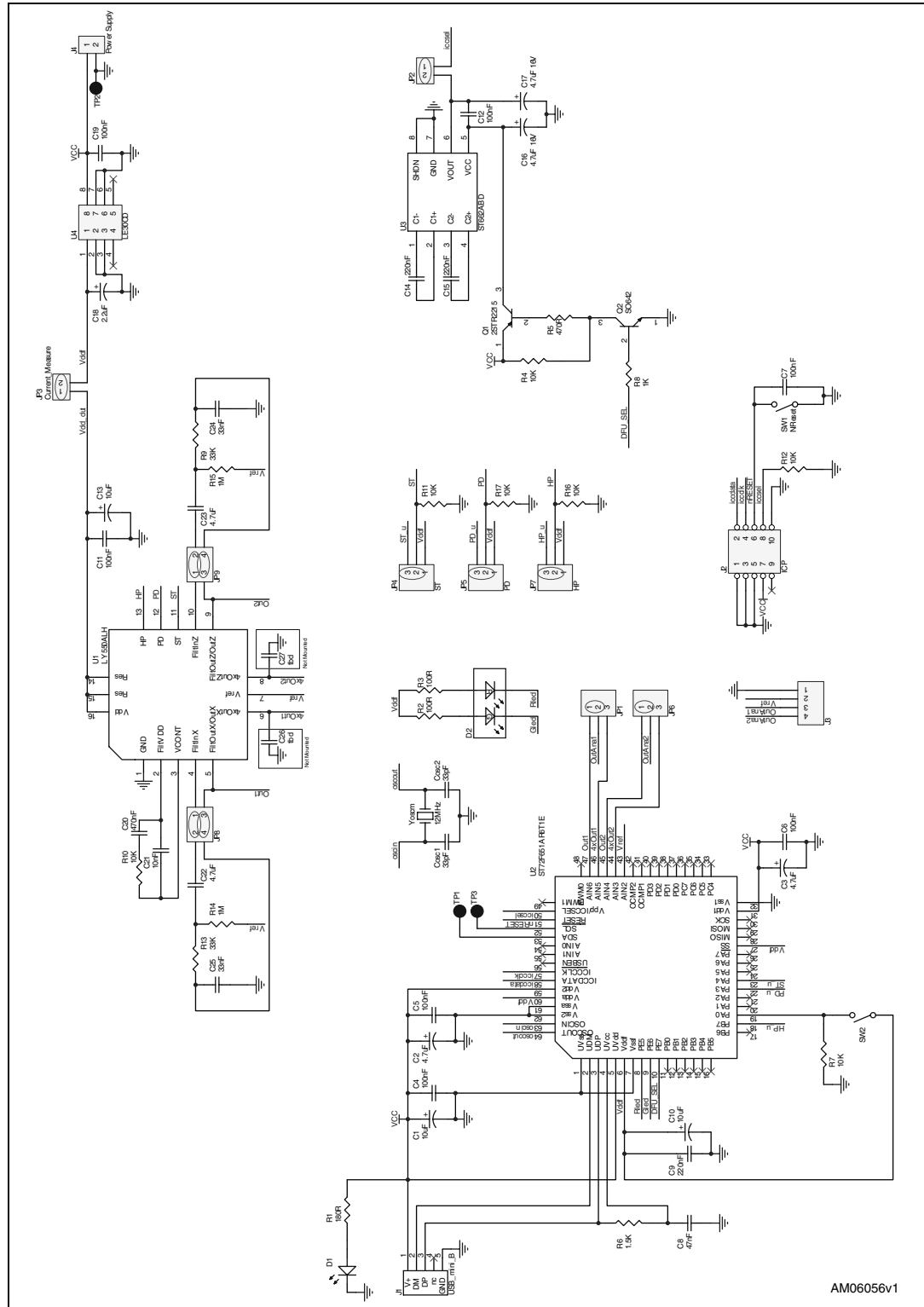
This is the default working mode when power is supplied either through the USB connector or through the supply connector.

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



# 1 Schematic diagrams

Figure 1. STEVAL-MKI041V1 circuit diagrams



AM06056v1



## 2 Revision history

**Table 1. Document revision history**

Date	Revision	Changes
26-Jan-2010	1	Initial release.

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