



STEVAL-MKI038V1

MEMS analog output demonstration board for the LPY550A
+/-500 °/s and +/-2000 °/s, dual axis pitch and yaw gyroscope

Data brief

Features

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

Description

The STEVAL-MKI038V1 is a demonstration board designed to provide the user with a complete, ready-to-use platform for demonstration of the LPY550AL 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.

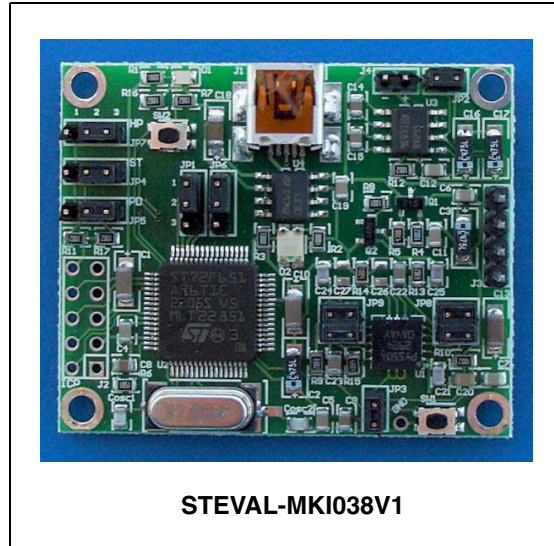
In addition to the MEMS sensor, the demonstration board utilizes an ST7-USB microcontroller which functions as a bridge between the sensor and the PC, on which it is possible to use the graphical user interface (GUI) available for download from the ST website, or dedicated software routines for customized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

The STEVAL-MKI038V1 is designed for use 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.

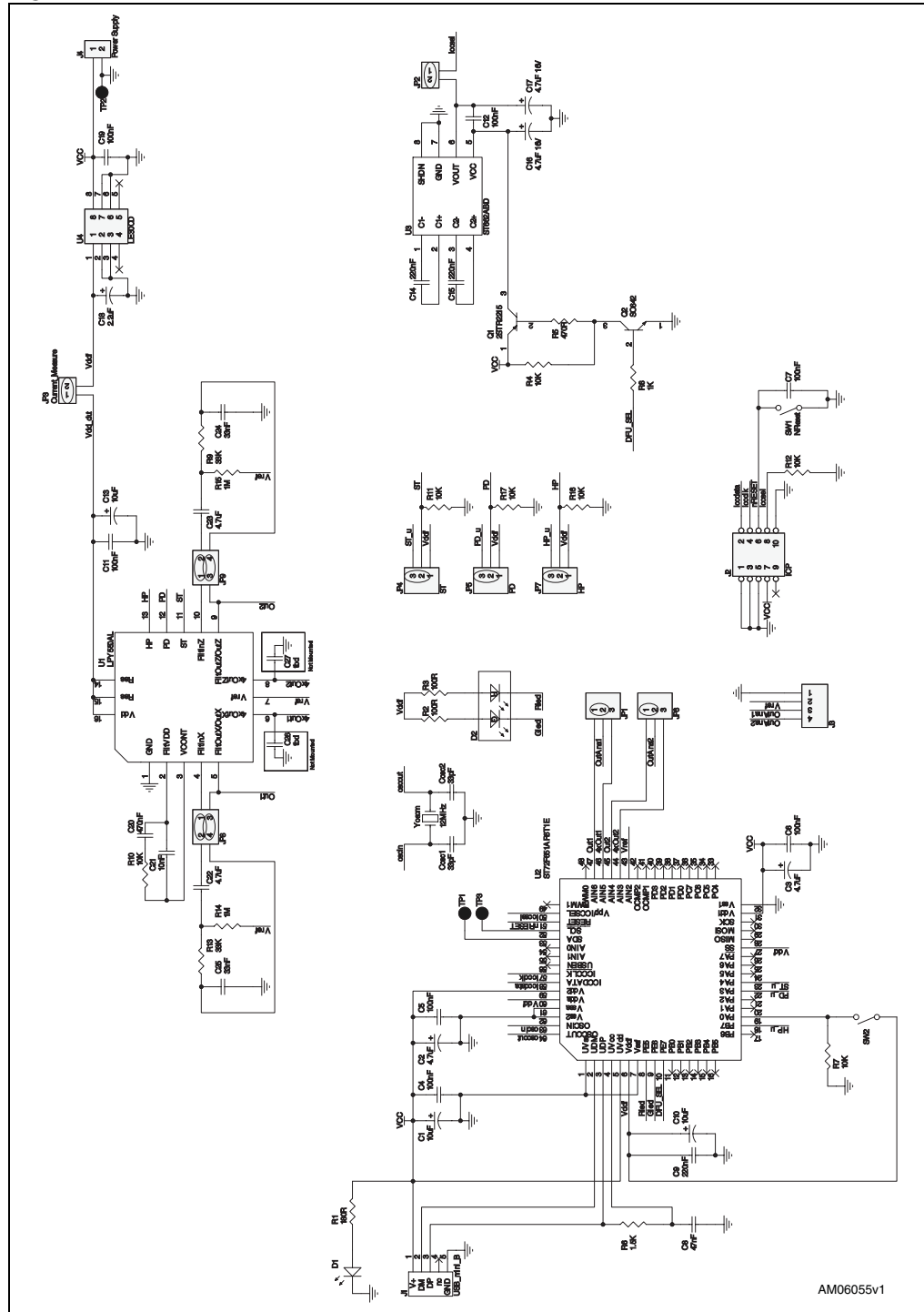
This is the default working mode when the power supply is applied either through the USB connector or through the supply connector.

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. Circuit schematic



AM06055v1



2 Revision history

Table 1. Document revision history

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

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