



STEVAL-MKI035V1

MEMS analog output demonstration board for the LPR530AL, $\pm 300^\circ/\text{s}$ and $\pm 1200^\circ/\text{s}$, dual-axis pitch and roll gyroscope

Data brief

Features

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

Description

The STEVAL-MKI035V1 is a demonstration kit designed to provide the user with a complete, ready-to-use platform for demonstration of the LPR530AL dual-axis pitch and roll $\pm 300^\circ/\text{s}$ analog gyroscope.

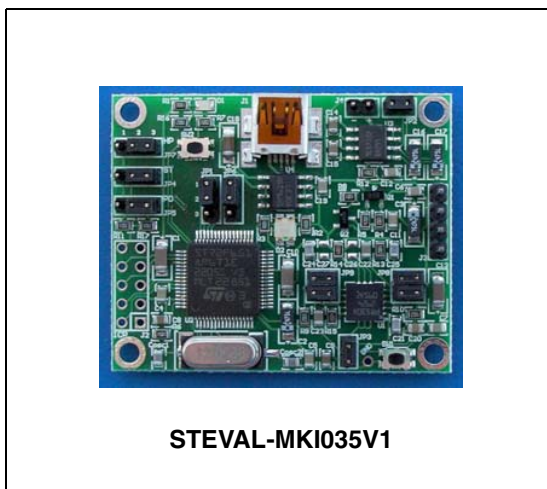
The device includes a sensing element and an IC interface capable of translating information from the sensing element into a measured signal that can be used for external applications.

In addition to the MEMS sensor, the demonstration board utilizes an ST72651AR6 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 STMicroelectronics web site, or dedicated software routines for customized applications.

The STEVAL-MKI035V1 demonstration board is designed to function in two different working modes: analog working mode and digital working mode.

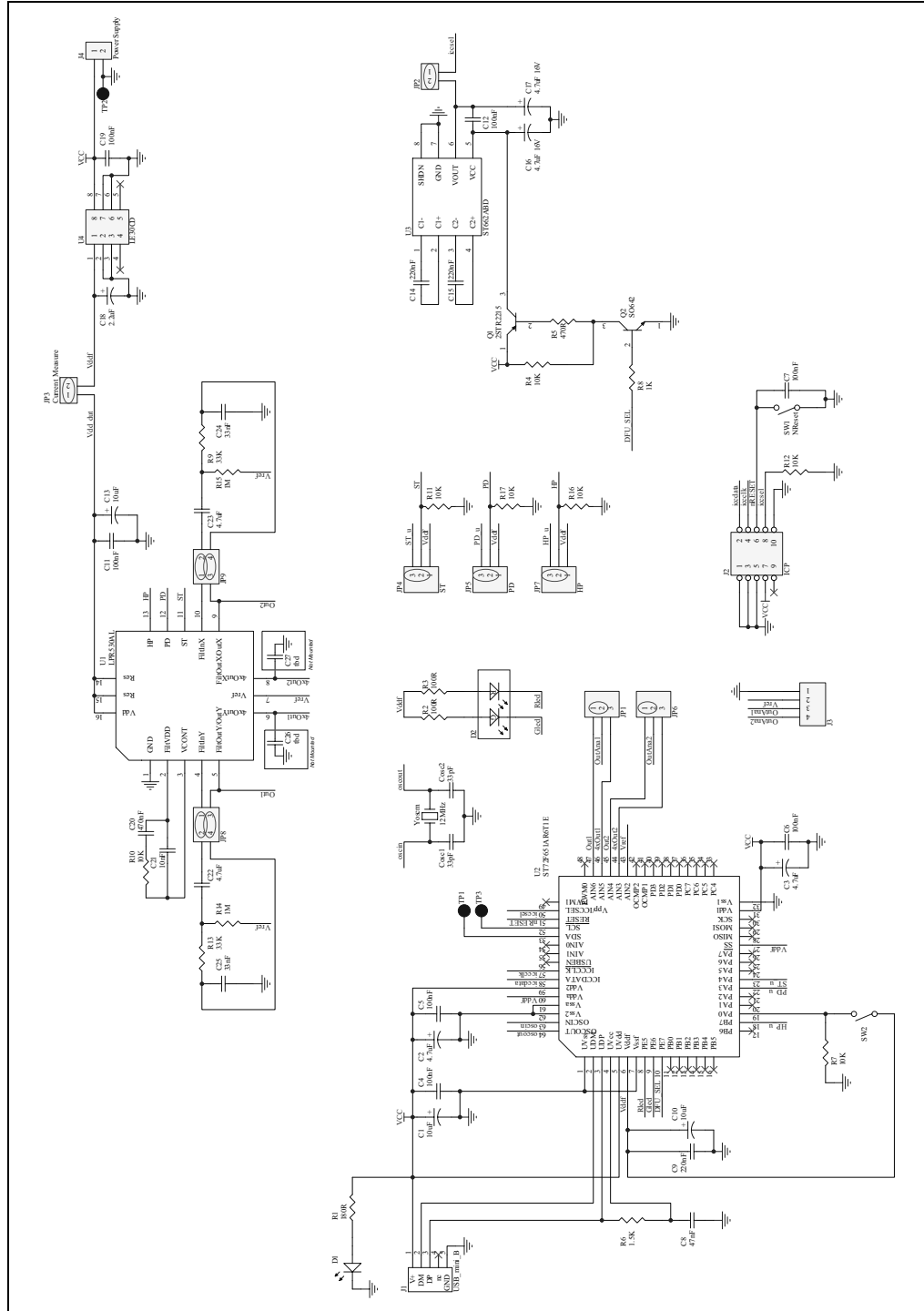
In the analog working mode (AWM), the microcontroller is disabled and the analog outputs of the device are available to the user on a dedicated connector. This is the default working mode when power supply is applied either through the USB connector or through the supply connector.

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



1 Schematic diagram

Figure 1. STEVAL-MKI035V1 schematic diagram



2 Revision history

Table 1. Document revision history

| Date | Revision | Changes |
|-------------|----------|------------------|
| 11-Nov-2009 | 1 | Initial release. |

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