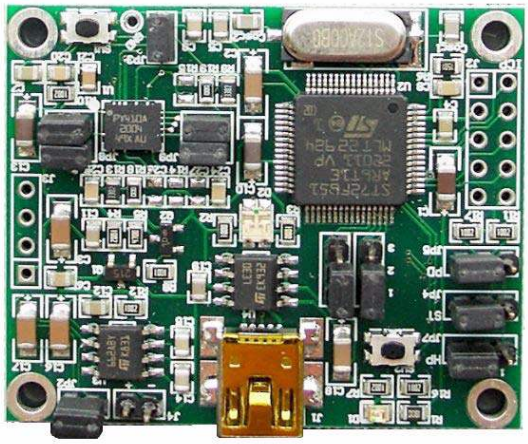
# STEVAL-MKI080V1

## MEMS demonstration board based on the LPR410AL analog output 2-axis gyroscope

**Data brief**

## Features

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



**STEVAL-MKI080V1**

## Description

The STEVAL-MKI080V1 demonstration board is designed to provide the user with a complete, ready-to-use platform for demonstration of the LPR410AL product family.

The STEVAL-MKI080V1 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-MKI080V1 demonstration board has been designed for use in two different working modes: analog and digital.

In analog 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 is supplied through either the USB connector or the supply connector.

In digital 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.



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# 1 Schematic diagrams

**Figure 1. STEVAL-MKI080V1 circuit schematics (1 of 2)**

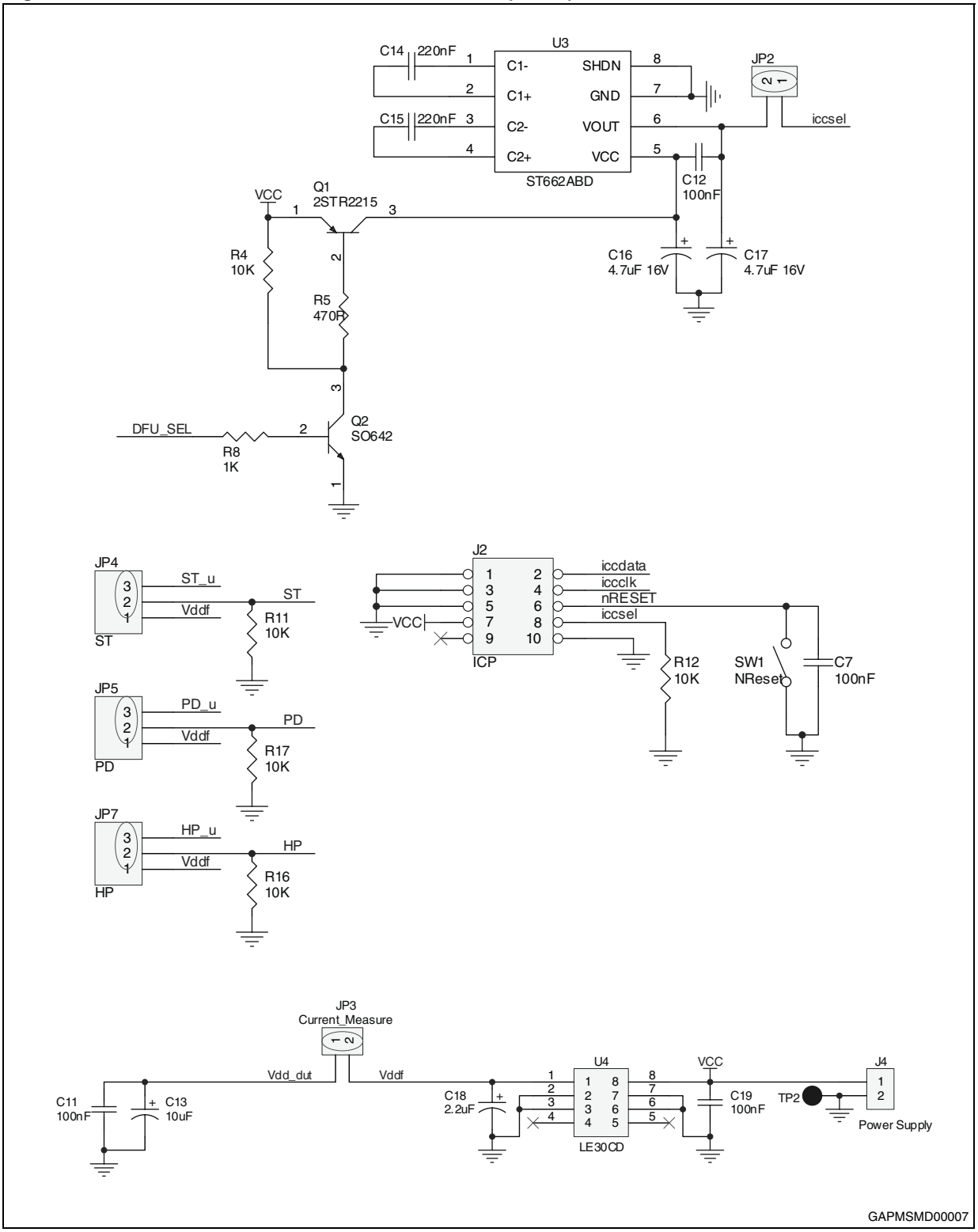
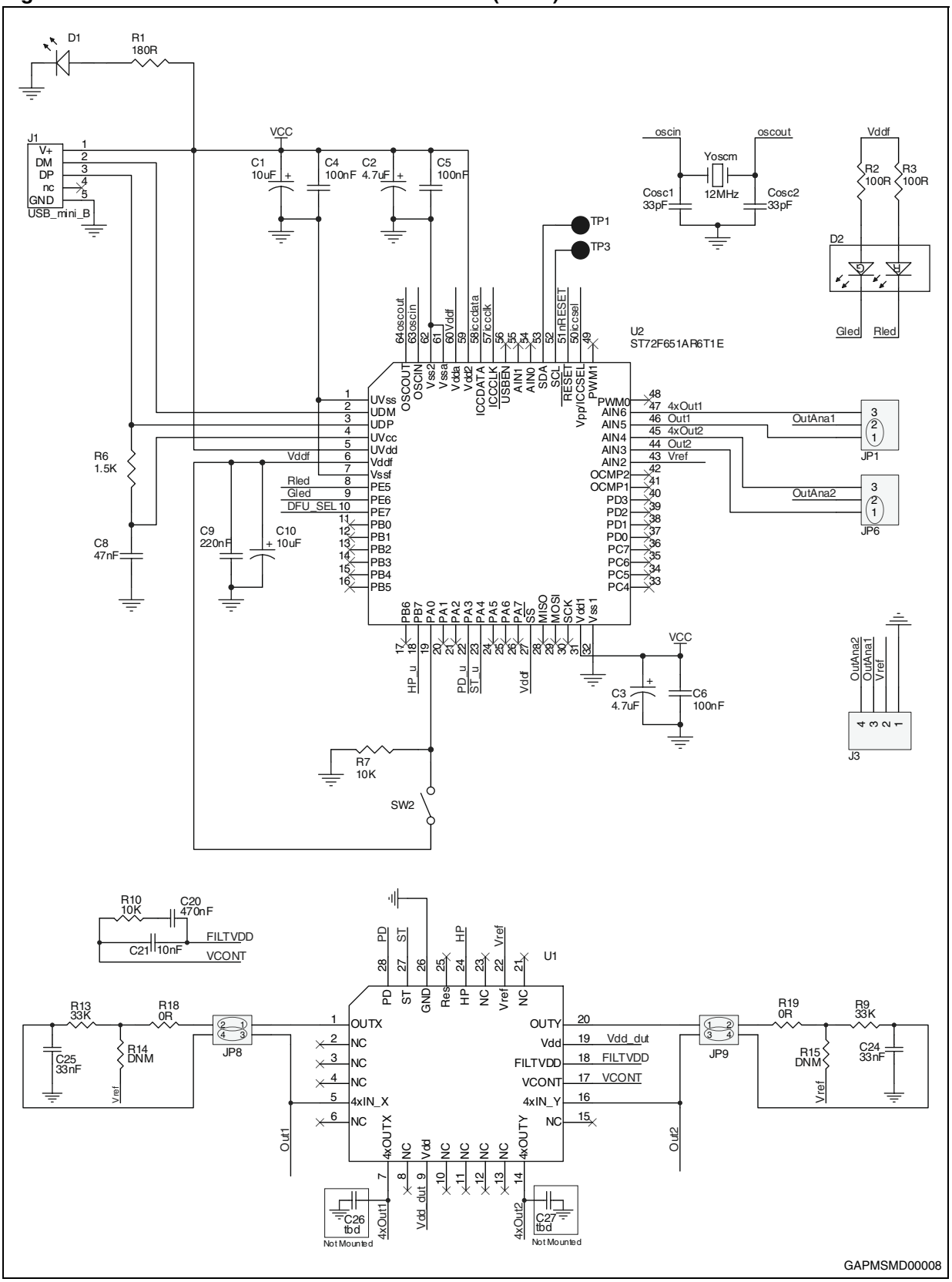


**Figure 2. STEVAL-MKI080V1 circuit schematics (2 of 2)**



# 2 Revision history

**Table 1. Document revision history**

| Date | Revision | Changes |
|---|---|---|
| 04-Mar-2011 | 1 | Initial release. |

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