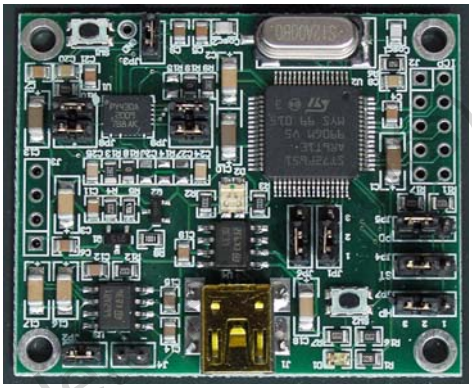
STEVAL-MKI079V1

MEMS demonstration board based on the LPR430AL (analog output two-axis gyroscope)

Data brief

Features

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



STEVAL-MKI079V1

Description

The STEVAL-MKI079V1 is a demonstration board designed to provide the user with a complete, ready-to-use platform for demonstration of the LPR430AL 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-MKI079V1 demonstration board has been designed for use in two different working modes: analog and digital.

In analog 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.

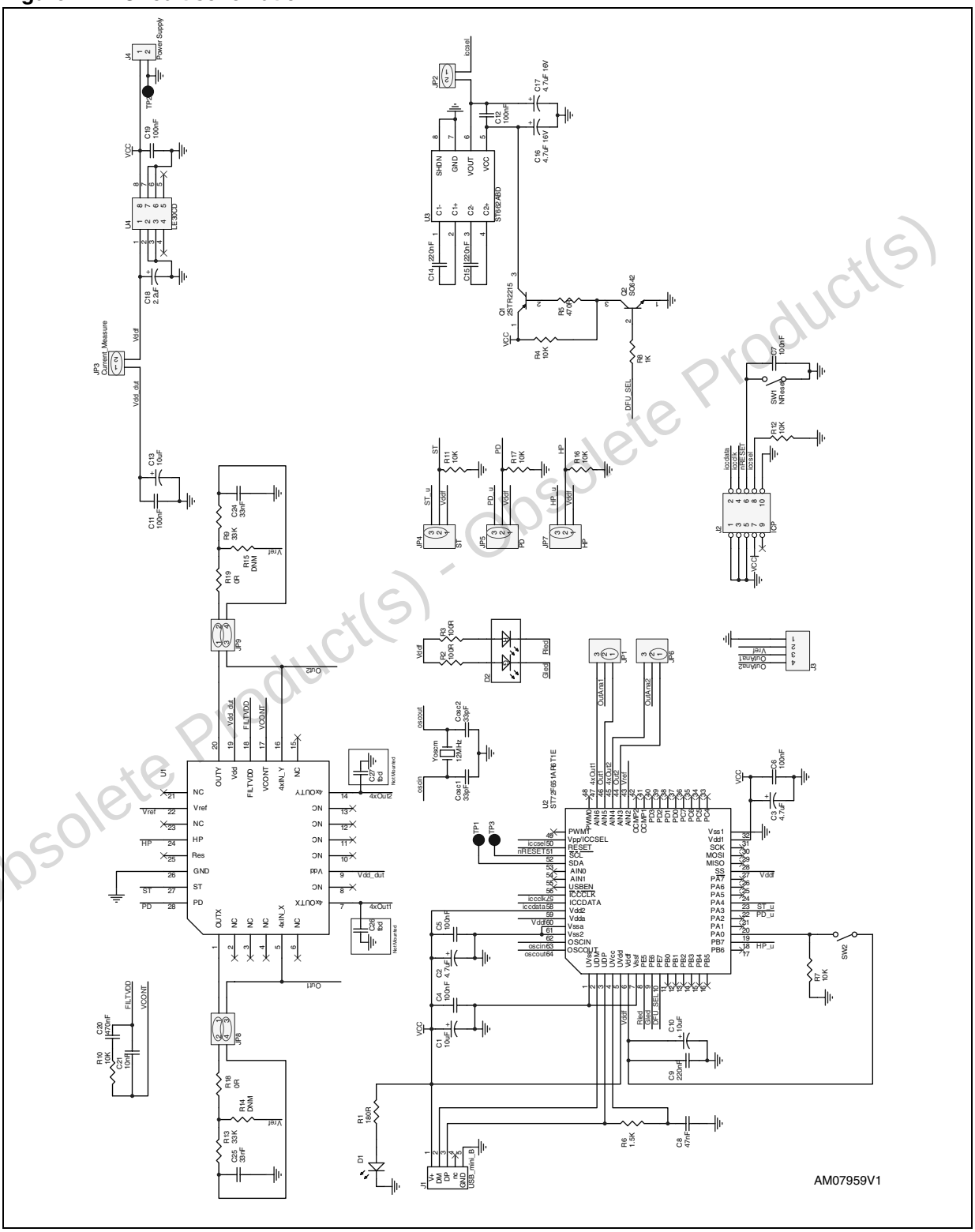
In digital mode (DWM) the microcontroller on the board is enabled and it allows the user to digitally acquire the output signals of the device, to see them on the PC through the dedicated GUI, and to control the control pins of the device.

Obsolete Product(s) - Obsole

For further information contact your local STMicroelectronics sales office. www.st.com

1 Schematic diagram

Figure 1. Circuit schematic



Obsolete Product(s) - Obsolete Product(s)

2 Revision history

Table 1. Document revision history

Date	Revision	Changes
10-Sep-2010	1	Initial release.

Obsolete Product(s) - Obsolete Product(s)

Please Read Carefully:

Information in this document is provided solely in connection with ST products. STMicroelectronics NV and its subsidiaries (“ST”) reserve the right to make changes, corrections, modifications or improvements, to this document, and the products and services described herein at any time, without notice.

All ST products are sold pursuant to ST’s terms and conditions of sale.

Purchasers are solely responsible for the choice, selection and use of the ST products and services described herein, and ST assumes no liability whatsoever relating to the choice, selection or use of the ST products and services described herein.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted under this document. If any part of this document refers to any third party products or services it shall not be deemed a license grant by ST for the use of such third party products or services, or any intellectual property contained therein or considered as a warranty covering the use in any manner whatsoever of such third party products or services or any intellectual property contained therein.

UNLESS OTHERWISE SET FORTH IN ST’S TERMS AND CONDITIONS OF SALE ST DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY WITH RESPECT TO THE USE AND/OR SALE OF ST PRODUCTS INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE (AND THEIR EQUIVALENTS UNDER THE LAWS OF ANY JURISDICTION), OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT.

UNLESS EXPRESSLY APPROVED IN WRITING BY AN AUTHORIZED ST REPRESENTATIVE, ST PRODUCTS ARE NOT RECOMMENDED, AUTHORIZED OR WARRANTED FOR USE IN MILITARY, AIR CRAFT, SPACE, LIFE SAVING, OR LIFE SUSTAINING APPLICATIONS, NOR IN PRODUCTS OR SYSTEMS WHERE FAILURE OR MALFUNCTION MAY RESULT IN PERSONAL INJURY, DEATH, OR SEVERE PROPERTY OR ENVIRONMENTAL DAMAGE. ST PRODUCTS WHICH ARE NOT SPECIFIED AS "AUTOMOTIVE GRADE" MAY ONLY BE USED IN AUTOMOTIVE APPLICATIONS AT USER’S OWN RISK.

Resale of ST products with provisions different from the statements and/or technical features set forth in this document shall immediately void any warranty granted by ST for the ST product or service described herein and shall not create or extend in any manner whatsoever, any liability of ST.

ST and the ST logo are trademarks or registered trademarks of ST in various countries.

Information in this document supersedes and replaces all information previously supplied.

The ST logo is a registered trademark of STMicroelectronics. All other names are the property of their respective owners.

© 2010 STMicroelectronics - All rights reserved

STMicroelectronics group of companies

Australia - Belgium - Brazil - Canada - China - Czech Republic - Finland - France - Germany - Hong Kong - India - Israel - Italy - Japan - Malaysia - Malta - Morocco - Philippines - Singapore - Spain - Sweden - Switzerland - United Kingdom - United States of America

www.st.com

Obsolete Product(s) - Obsolete Product(s)