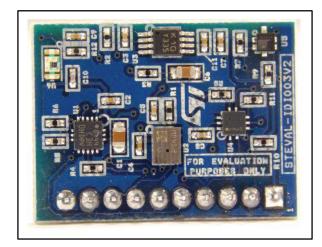


STEVAL-IDI003V2

Multi-sensor RF platform sensor board

Data brief



Description

The STEVAL-IDI003V2 is an evaluation platform for testing multiple MEMS sensors from STMicroelectronics. It is used in conjunction with the STEVAL-IDI002V2, as a daughterboard for the evaluation of the multi-sensor RF platform based on 6LowPAN. The STEVAL-IDI003V2 includes a MEMS accelerometer, pressure sensor, humidity sensor, and microphone. It also includes a photodiode. It connects to the STEVAL-IDI002V2 interface board using a 10-pin connector.

Features

- Contains the following ST sensors:
 - Pressure sensor LPS25HB
 - Humidity sensor HTS221
 - Accelerometer LIS3DHMicrophone MP34DT01
- AFE for processing the MP34DT01 microphone signal based on TSV522 low power, low offset op-amp
- Android app available
- RoHS compliant

Schematic diagrams STEVAL-IDI003V2

1 Schematic diagrams

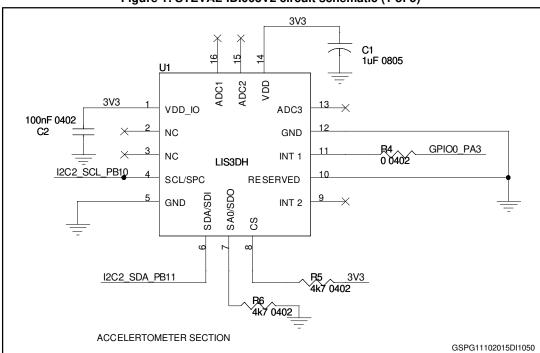
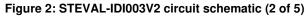


Figure 1: STEVAL-IDI003V2 circuit schematic (1 of 5)



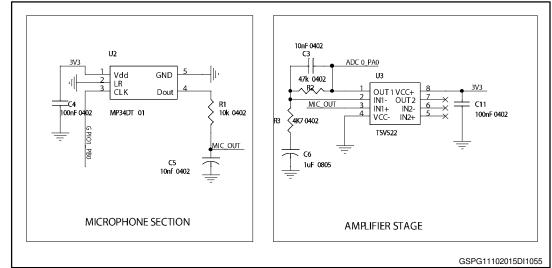


Figure 3: STEVAL-IDI003V2 circuit schematic (3 of 5)

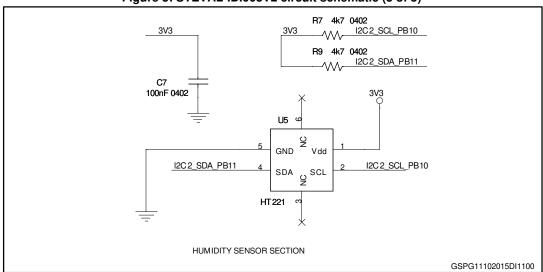
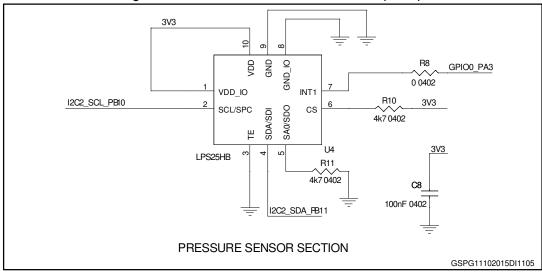


Figure 4: STEVAL-IDI003V2 circuit schematic (4 of 5)



ADC 1 PA1

ADC 1 PA1

OUT NC VCC VCC 3 APDS-9004

VCC VCC VCC 3 APDS-9004

PHOTODETECTOR SECTION

DAUGHTER BOARD CONNECTOR

J1

3V3

LEC 2 SCL PB10 X 3

LEC 2 SCL PB10 X 3

APDS-9004

R12

ADC 1 PA1 9

ADC 1 PA1 9

CON 10

DAUGHTER BOARD CONNECTOR

Figure 5: STEVAL-IDI003V2 circuit schematic (5 of 5)

STEVAL-IDI003V2 Revision history

2 Revision history

Table 1: Document revision history

Date	Version	Changes
01-Sep-2015	1	Initial release.
19-May-2016	2	Updated features on the cover page.

IMPORTANT NOTICE - PLEASE READ CAREFULLY

STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers' products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2016 STMicroelectronics - All rights reserved

