

Microphone coupon board based on the MP23AB01DM analog MEMS microphone

Data brief



Description

The STEVAL-MKI139V4 board contains four MP23AB01DM analog MEMS microphones.

The coupon design allows easy performance testing of STM MEMS microphones, with the possibility of detaching the single PCBs hosting each microphone.

Features

- 4xMP23AB01DM bottom port analog MEMS microphones
- Vsupply from 2.3 to 3.6 V
- 135 dBSPL acoustic overload point
- Omnidirectional sensitivity
- Frequency range 100 Hz - 10 kHz
- 65 dB of SNR
- Sensitivity -38 dBFV ± 1 dBV
- THD < 0.5% @ 94 dBSPL, 1 kHz
- THD < 4% @ 130 dBSPL, 1 kHz
- RoHS compliant

1 Schematic diagrams

Figure 1: STEVAL-MKI139V4 coupon circuit schematic

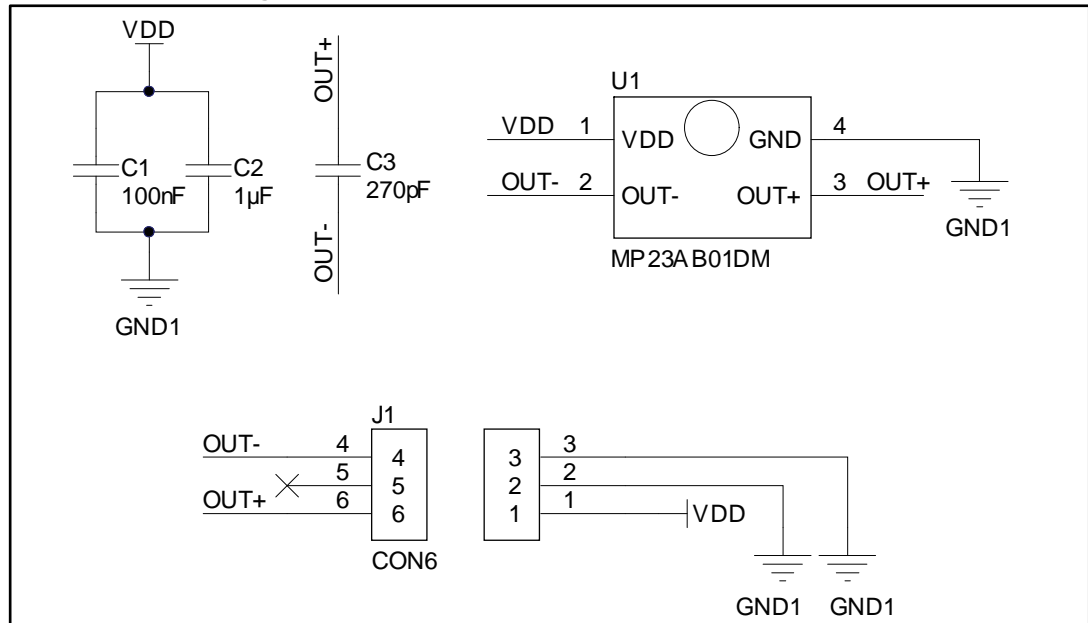
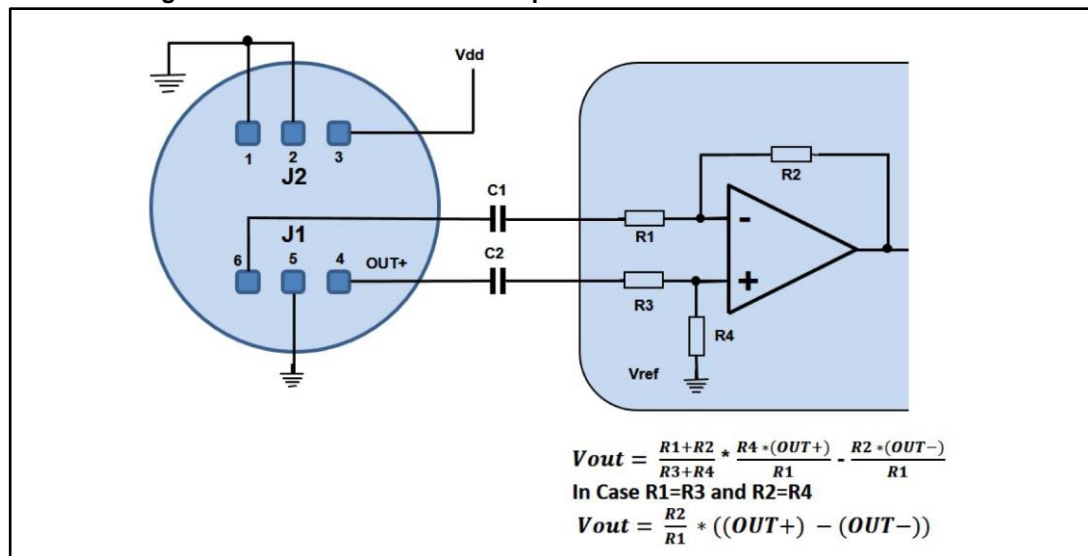


Figure 2: STEVAL-MKI139V4 example of external electrical connections



2 Revision history

Table 1: Document revision history

Date	Version	Changes
21-Feb-2017	1	Initial release.
11-May-2017	2	Updated: title, features and description 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.

© 2017 STMicroelectronics – All rights reserved