

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 dB SPL acoustic overload point
- Omnidirectional sensitivity
- Frequency range 100 Hz - 10 kHz
- 65 dB of SNR
- Sensitivity -38 dBV \pm 1 dBV
- THD < 0.5% @ 94 dB SPL, 1 kHz
- THD < 4% @ 130 dB SPL, 1 kHz
- RoHS compliant

1 Schematic diagrams

Figure 1: STEVAL-MKI139V4 coupon circuit schematic

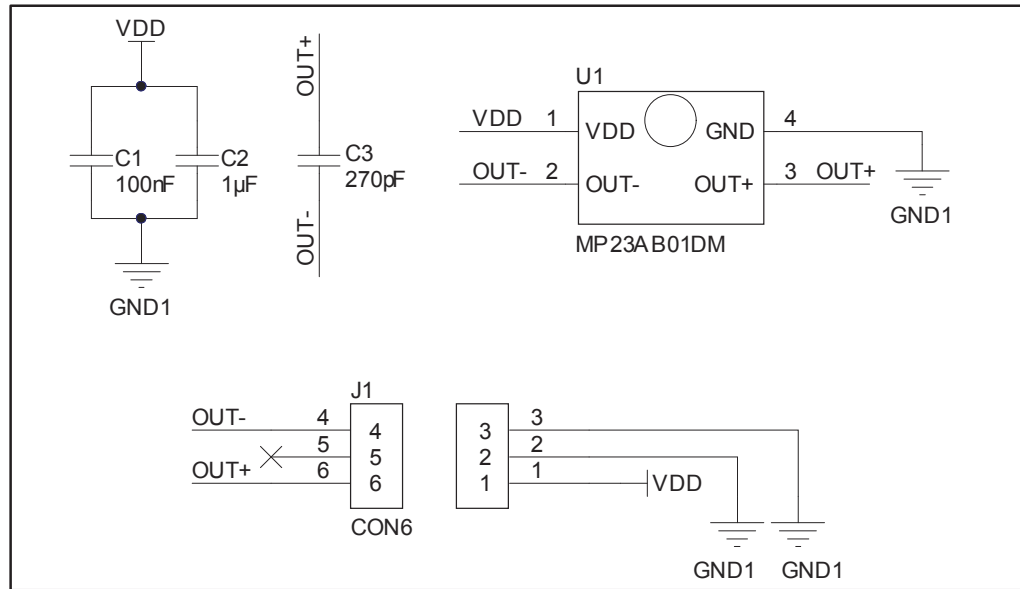
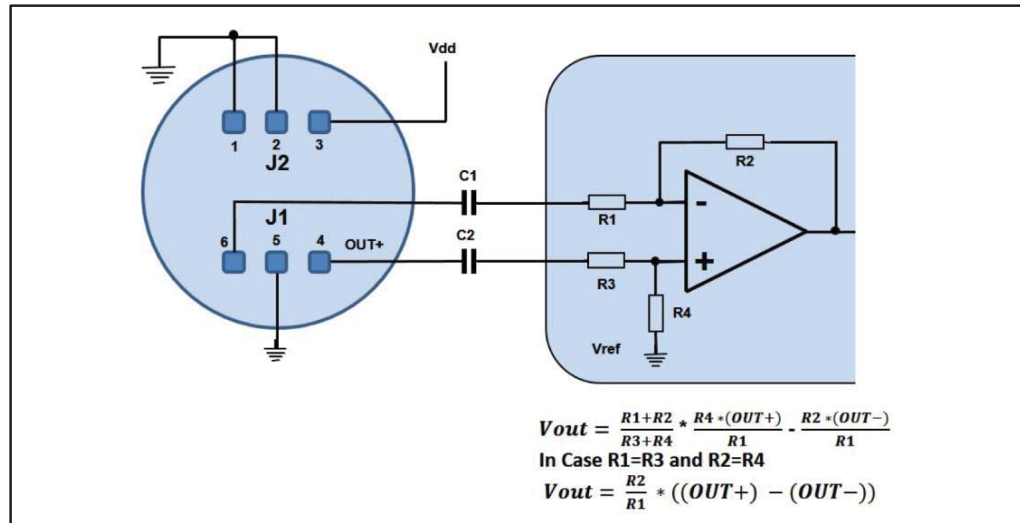


Figure 2: STEVAL-MKI139V4 example of external electrical connections



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.

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