Microphone coupon board based on the MP34DT05-A digital MEMS

**Features**
- 4 x MP34DT05-A top port digital MEMS microphones
- Daughterboard to be used with X-NUCLEO-CCA02M1
- Vsupply from 1.6 to 3.6 V
- 122.5 dBSPL acoustic overload point
- Omnidirectional sensitivity
- PDM single-bit output
- 64 dB of SNR
- Sensitivity -26 dBSFS ±3 dB
- RoHS compliant

**Description**
The STEVAL-MIC001V1 daughterboard is designed to be used in conjunction with the X-NUCLEO-CCA02M1 expansion board; it is able to export the four additional PDMs for any user application requirement (NBW algorithm detection).

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**Summary table**

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<th>STEVAL-MIC001V1 daughterboard</th>
<th>STEVAL-MIC001V1</th>
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<tr>
<td>X-NUCLEO-CCA02M1 evaluation board based on digital MEMS microphones</td>
<td>X-NUCLEO-CCA02M1</td>
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<tr>
<td>MP34DT05-A ultra-compact, low-power, omnidirectional, digital MEMS microphone</td>
<td>MP34DT05-A</td>
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1 Schematic diagrams

Figure 1. STEVAL-MIC001V1 circuit schematic

- C1: 100 nF
- C2: 1 µF
- VDD1
- GND1
- MP34DT05-A
- CLK1
- DATA1
- Vdd
- U1
- GND1
- J1
- L/R1
- CON8
- VDD1

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# Revision history

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<th>Date</th>
<th>Version</th>
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<tr>
<td>07-Dec-2017</td>
<td>1</td>
<td>Initial release.</td>
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<tr>
<td>25-Jan-2018</td>
<td>2</td>
<td>Updated: title.</td>
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Table 1. Document revision history
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