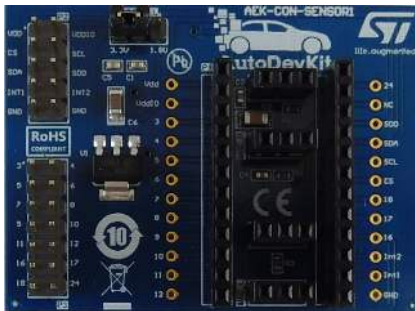


## Connector board for SPC5 MCU discovery boards and MEMS sensor boards in DIL 24 socket



### Features

- Connects the [AEK-MCU-C4MLIT1](#) MCU discovery board to the MEMS sensor boards in DIL 24 socket
- Supports several sensors: digital microphones, 2D and 3D accelerometers, inclinometers
- Hosts a 1.8 V LDO voltage regulator for MEMS board supply
- Compact size: 56 mm x 41 mm
- WEEE and RoHS compliant
- Included in the [AutoDevKit](#) initiative

### Description

The [AEK-CON-SENSOR1](#) connector board is designed to interface MEMS sensor boards in DIL 24 socket to an SPC5 MCU discovery board like the [AEK-MCU-C4MLIT1](#) hosting a [SPC58EC80E5](#) Chorus family automotive MCU with 4 MB flash.

The connector board includes a 1.8 V LDO voltage regulator to supply MEMS boards.

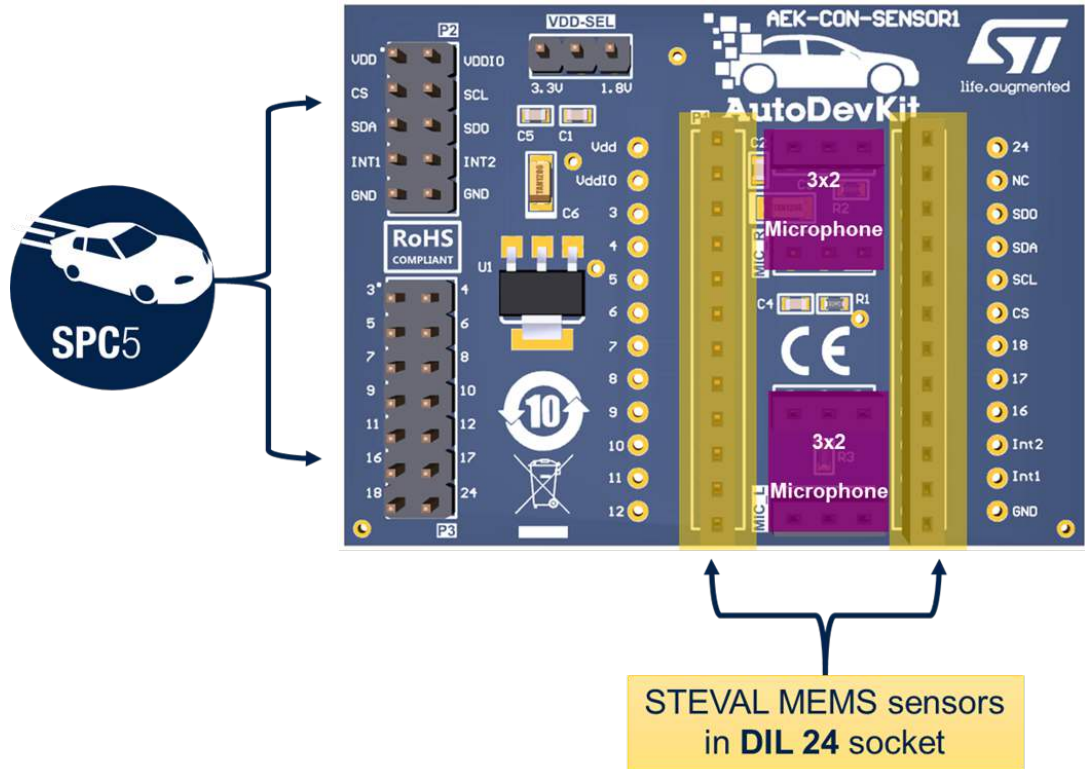
Two male strip connectors allow connecting the [AEK-MCU-C4MLIT1](#): the main one (5x2) is used for power supply, SPI interface and signal interrupt, whereas the second one (7x2) is used for optional GPIO connections depending on the plugged MEMS sensor board.

For the MEMS sensor board connection, three female strip connectors are used: the main one (12x2) hosts the MEMS sensors in DIL 24 socket, whereas the other two (3x2) host digital microphones.

Product summary	
Connector board for AEK-MCU-C4MLIT1 MCU discovery board and MEMS sensor boards in DIL 24 socket	<a href="#">AEK-CON-SENSOR1</a>
MCU discovery board for SPC5 Chorus 4M automotive microcontroller with CAN transceivers	<a href="#">AEK-MCU-C4MLIT1</a>
MEMS sensor boards in DIL 24 socket	<a href="#">STEVAL-MKI193V1/</a> <a href="#">STEVAL-MKI206V1/</a> <a href="#">STEVAL-MKI208V1K/</a> <a href="#">STEVAL-MKI209V1K/</a> <a href="#">STEVAL-MKI211V1K/</a> <a href="#">STEVAL-MKI212V1/</a> <a href="#">STEVAL-MIC006V1</a>
AutoDevKit library plugin for SPC5-STUDIO	<a href="#">STSW-AUTODEVKIT</a>
Applications	In-Vehicle Infotainment/Electro-Mobility/Telematics Box

# 1 Block diagram

Figure 1. AEK-CON-SENSOR1 block diagram



## 2 Schematic diagram



Figure 2. AEK-CON-SENSOR1 circuit schematic

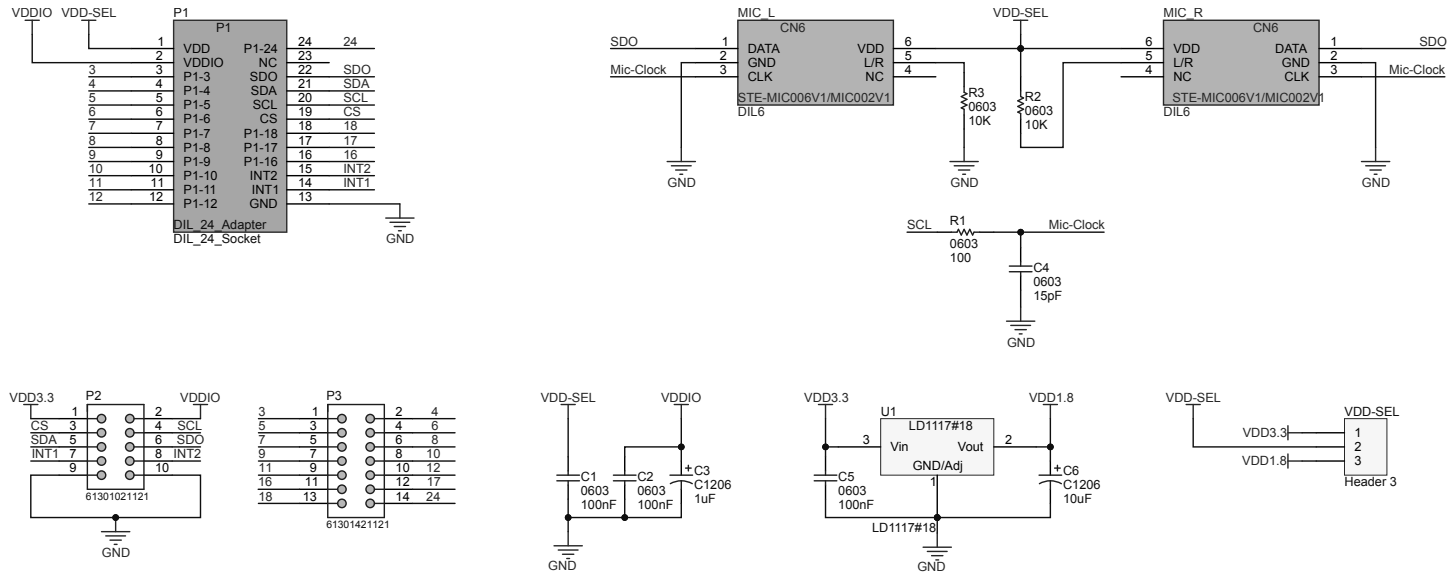
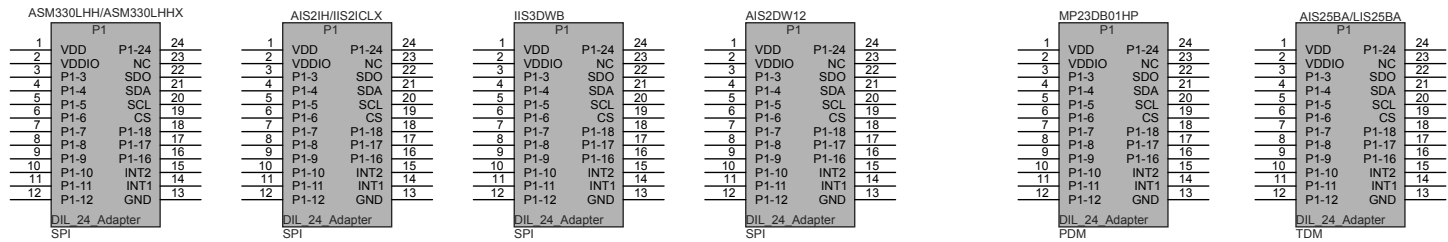


Figure 3. Additional MEMS sensors in DIL 24 circuit schematic



## Revision history

**Table 1. Document revision history**

Date	Version	Changes
10-Feb-2021	1	Initial release.
29-Sep-2022	2	Updated product summary table and <a href="#">Section 2 Schematic diagram</a> . Added references to STEVAL-MKI212V1 and ASM330LHHX.

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