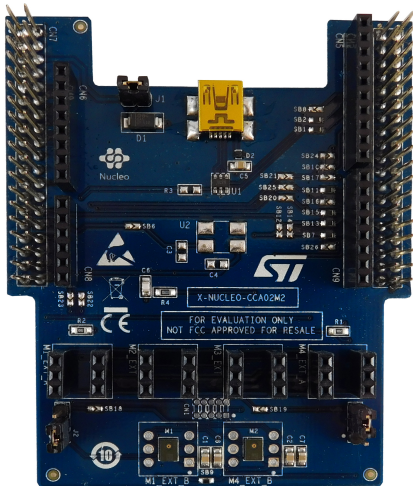


Digital MEMS microphone expansion board based on MP34DT06J for STM32 Nucleo



Features

- 2 on-board **MP34DT06J** digital MEMS microphones
- 6 slots to plug in digital microphone coupon boards such as **STEVAL-MIC001V1**, **STEVAL-MIC002V1** and **STEVAL-MIC003V1**
- Synchronized acquisition and streaming of up to 4 microphones
- Free comprehensive development firmware library and audio capture plus USB streaming sample application compatible with **STM32Cube**
- Compatible with **STM32 Nucleo** boards
- Equipped with ST morpho connector (upwards and downwards)
- Equipped with Arduino UNO R3 connector (upwards) to allow multiple boards
- RoHS and WEEE compliant

Description

The **X-NUCLEO-CCA02M2** expansion board has been designed around **MP34DT06J** digital MEMS microphone.

It is compatible with the ST morpho connector layout and with digital microphone coupon boards such as **STEVAL-MIC001V1**, **STEVAL-MIC002V1** and **STEVAL-MIC003V1**.

The **X-NUCLEO-CCA02M2** embeds two **MP34DT06J** microphones and allows synchronized acquisition and streaming of up to 4 microphones through I²S, SPI, DFSDM or SAI peripherals.

It represents a quick and easy solution for the development of microphone-based applications as well as a starting point for audio algorithm implementation.

Product summary	
Digital MEMS microphone expansion board based on MP34DT06J for STM32 Nucleo	X-NUCLEO-CCA02M2
MEMS audio sensor omnidirectional stereo digital microphone	MP34DT06J
Microphone coupon board based on MP34DT05-A	STEVAL-MIC001V1
Microphone coupon board based on MP34DT06J	STEVAL-MIC002V1
Microphone coupon board based on IMP34DT05	STEVAL-MIC003V1

1 Schematic diagrams

Figure 1. X-NUCLEO-CCA02M2 circuit schematic (1 of 3)

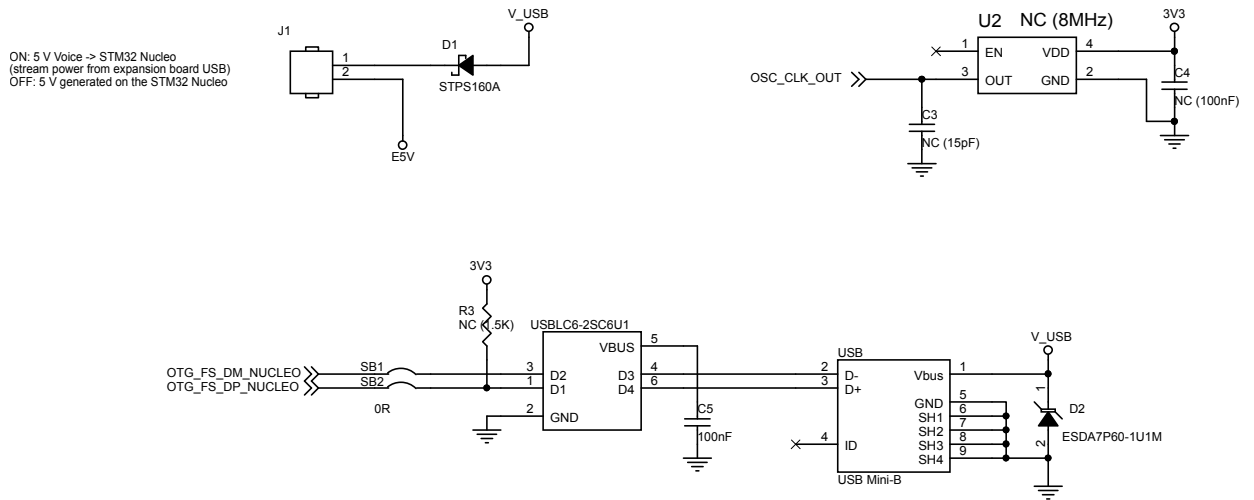


Figure 2. X-NUCLEO-CCA02M2 circuit schematic (2 of 3)

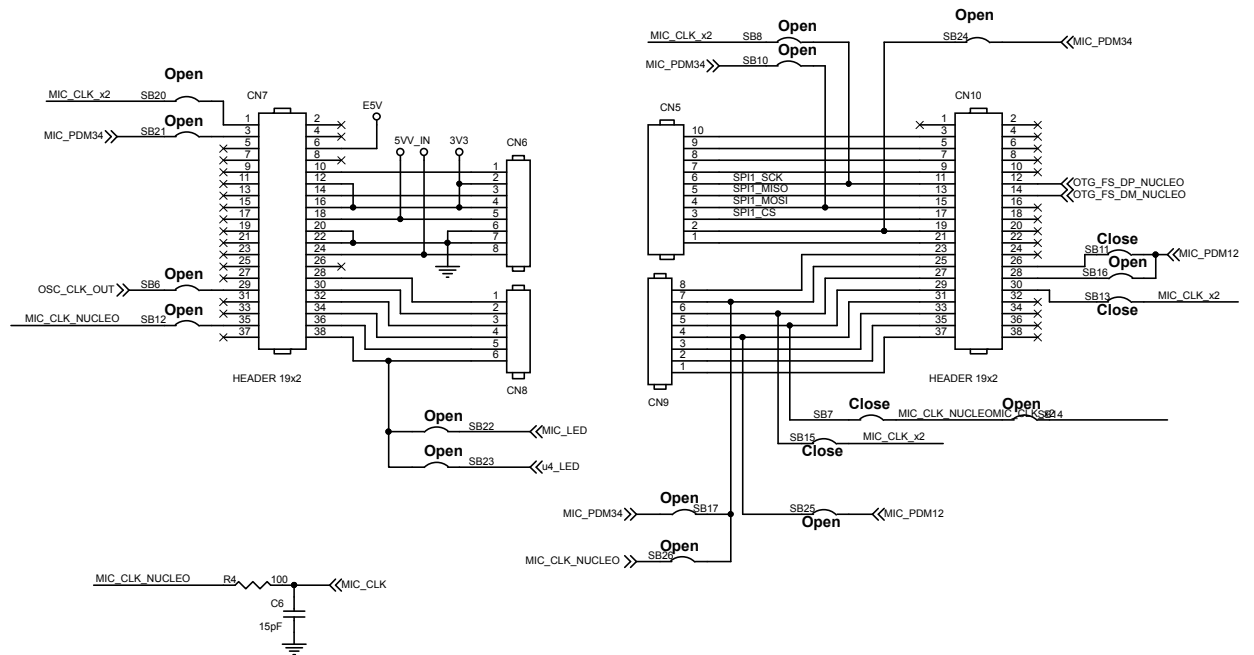
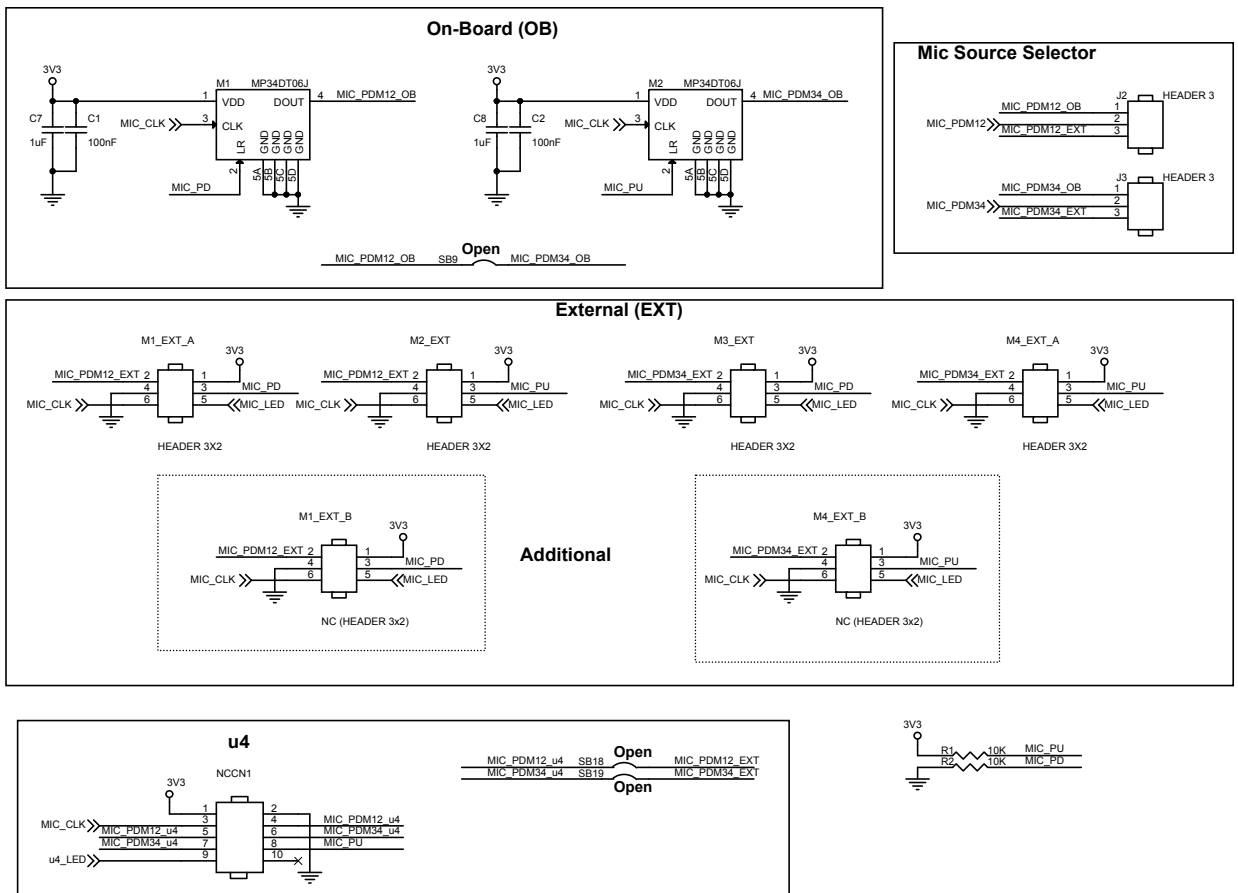


Figure 3. X-NUCLEO-CCA02M2 circuit schematic (3 of 3)



Revision history

Table 1. Document revision history

Date	Version	Changes
18-Sep-2019	1	Initial release.

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. For additional information about ST trademarks, please refer to www.st.com/trademarks. 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.

© 2019 STMicroelectronics – All rights reserved

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Audio IC Development Tools](#) category:

Click to view products by [STMicroelectronics](#) manufacturer:

Other Similar products are found below :

[1580/5171-DEMO](#) [LM4906MMBD](#) [LM4935RLEVAL](#) [LME49710NABD](#) [LME49740MABD](#) [LME49740NABD](#) [LME49860MABD](#)
[LME49870MABD](#) [EVAL-AD1940AZ](#) [EVAL-ADAU1401AEBZ](#) [SRC4382EVM-PDK](#) [TLV320AIC36EVM-K](#) [TPA5052EVM](#)
[TPA6136A2YFFEVM](#) [LM4562HABD](#) [LM4906LDBD](#) [LM4923LQBD](#) [LM4992SDBD](#) [LME49710MABD](#) [LME49713MABD](#)
[LME49860NABD](#) [MAX98300EVKIT+WLP](#) [MAX9738EVKIT+](#) [MAX98358EVSYS#WLP](#) [MAX9723DEVKIT+](#) [EVAL-ADAV803EBZ](#)
[MAX9890EVKIT+](#) [LM4809MBD](#) [LM4674TLBD](#) [CDBWM8725-M-1](#) [CDBWM8533-M-1](#) [EV_ICS-40740-FX](#) [SDCK3](#) [PIM524](#)
[MAX9723DEVCMODU+](#) [DEV-17737](#) [EVALAHNBIM69D130V01TOBO1](#) [1063](#) [TAS5756MDCAEVM](#) [TLV320ADC3101EVM-K](#)
[TLV320AIC3007EVM-K](#) [TLV320AIC3105EVM-K](#) [TLV320AIC3253EVM-K](#) [TLV320DAC32EVM-PDK](#) [TPA2016D2EVM](#)
[TPA2035D1EVM](#) [TPA2051D3YFFEVM](#) [TPA3107D2EVM](#) [TPA6120A2EVM](#) [TPA6132A2EVM2](#)