

B-CAMS-OMV

Data brief

Camera module bundle for STM32 boards



B-CAMS-OMV top view without FFC. Picture is not contractual.

> Product status link B-CAMS-OMV

Features

- Camera module adapter board (MB1683)
 - 1 × 30 pin ZIF connector and extended GPIO connector for easy connection to compatible STM32 boards
 - STMicroelectronics camera module (MB1379) connector
 - OpenMV camera module connector
 - Waveshare camera board connector
 - 3.3 V power
- STMicroelectronics camera module (MB1379)
 - Based on the OV5640 image sensor offering a 5-Mpixel resolution with 8-bit color
- Flexible flat cable (FFC)

Description

The camera module bundle (B-CAMS-OMV) provides extension connectors for the MB1379 STMicroelectronics camera module daughterboard or third-party modules like OpenMV and Waveshare modules. It can be used with the STM32 boards featuring a 1 × 30 pin ZIF connector for the connection of multiple cameras to implement computer vision on STM32 microcontrollers easily.

The camera module bundle is compatible with all STM32 Discovery kits and Evaluation boards featuring a ZIF connector, such as the STM32H747I-DISCO and 32L4R9IDISCOVERY Discovery kits.

1 Ordering information

To order the B-CAMS-OMV camera module bundle, refer to Table 1.

Table 1. Ordering information

Order code	Content and references	User manual	Target STM32 boards
B-CAMS-OMV	 MB1683⁽¹⁾ MB1379⁽²⁾ FFC⁽³⁾ 	UM2779	 STM32H747I-DISCO 32L4R9IDISCOVERY STM32 boards featuring a 1 × 30 pin ZIF connector

1. Camera module adapter board.

2. STMicroelectronics camera module mounted on MB1683.

3. Flexible flat cable.

The STM32 Discovery kits and Evaluation boards feature STM32 32-bit microcontrollers based on the Arm[®] Cortex[®] processor.

Note: Arm is a registered trademark of Arm Limited (or its subsidiaries) in the US and/or elsewhere.

arm

1.1 Product marking

The sticker located on the top or bottom side of the PCB shows the information about product identification such as board reference, revision, and serial number.

The first identification line has the following format: "MBxxxx-Variant-yzz", where "MBxxxx" is the board reference, "Variant" (optional) identifies the mounting variant when several exist, "y" is the PCB revision and "zz" is the assembly revision, for example B01.

The second identification line is the board serial number used for traceability.

Evaluation tools marked as "ES" or "E" are not yet qualified and therefore not ready to be used as reference design or in production. Any consequences deriving from such usage will not be at ST charge. In no event, ST will be liable for any customer usage of these engineering sample tools as reference designs or in production.

"E" or "ES" marking examples of location:

- On the targeted STM32 that is soldered on the board (For an illustration of STM32 marking, refer to the STM32 datasheet "Package information" paragraph at the *www.st.com* website).
- Next to the evaluation tool ordering part number that is stuck or silk-screen printed on the board.

2 Development environment

2.1 Demonstration software

The demonstration software supporting the use of the B-CAMS-OMV camera module bundle is available from the FP-AI-VISION1 STM32Cube function pack. The latest versions of the demonstration source code and associated documentation can be downloaded from *www.st.com*.

Revision history

Table 2. Document revision history

Date	Version	Changes
15-Dec-2020	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.

© 2020 STMicroelectronics - All rights reserved