

## Motor control connector expansion board for STM32 Nucleo



### Features

- ST motor control connector (34 pins) compatible with most ST motor control power boards
- STM32 Nucleo support, thanks to ST morpho connectors
- Compatible with the six-step and FOC motor control firmware library by ST
- Debug connector for DAC, GPIOs, and similar ones
- Fully populated board with test points
- LED for fault signaling or status indication
- Available potentiometer
- RoHS compliant



### Description

The X-NUCLEO-IHM09M2 is a motor control connector expansion board for [STM32 Nucleo](#). It provides an easy way to evaluate motor control solutions for three-phase motors by adapting the [STM32 Nucleo](#) development board with an external ST motor control power board, thanks to the ST morpho and motor control connector.

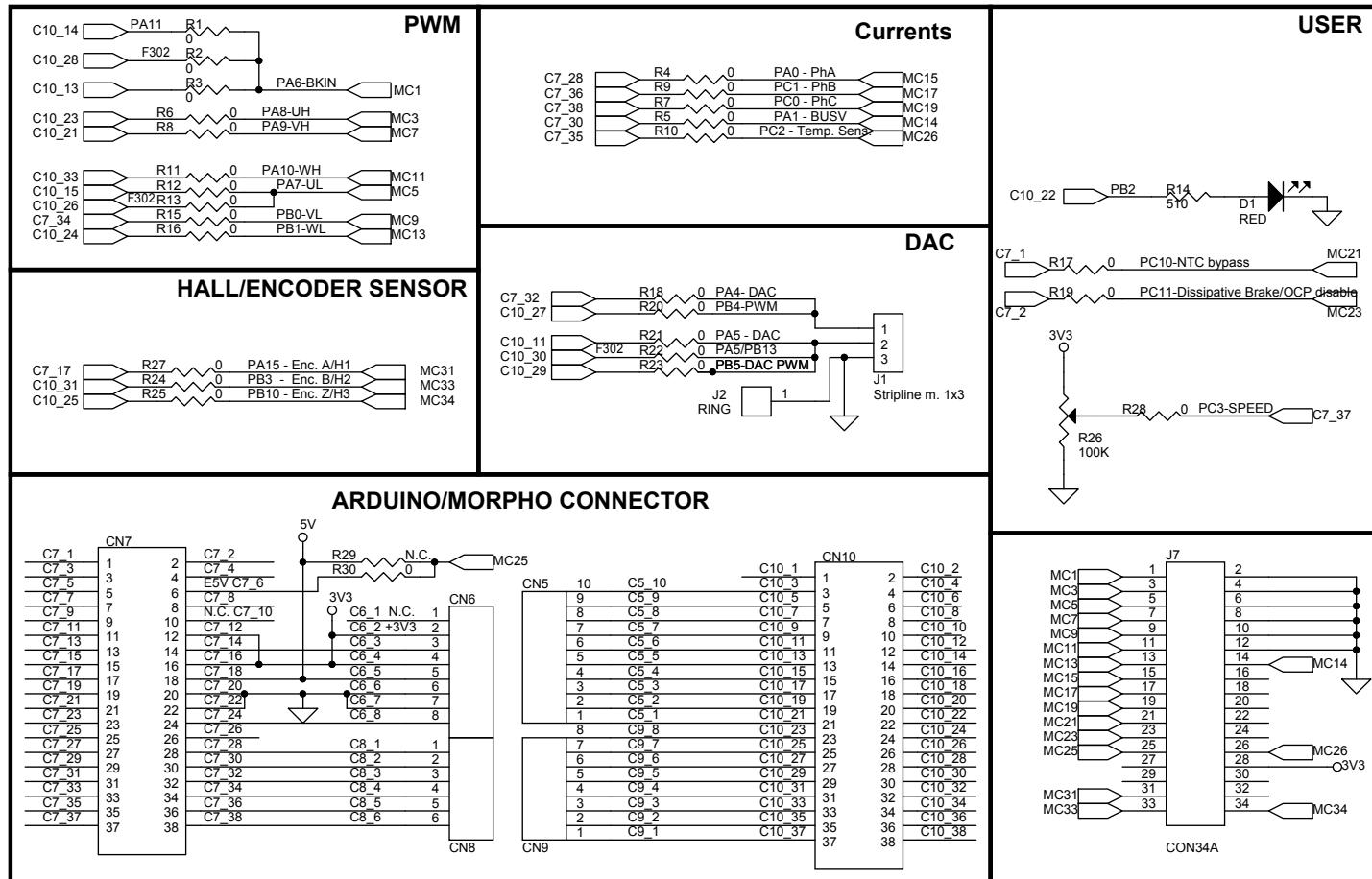
The 34-pin motor control connector is compatible with most ST motor control power boards, which require an external digital section (MCU) to drive a three-phase motor. The DAC connector supports the user code development and testing with easy access to the MCU peripherals.

A LED is available for fault condition signaling or status indication.

Product summary	
Motor control connector expansion board for STM32 Nucleo	<a href="#">X-NUCLEO-IHM09M2</a>
Applications	Motor Control

# 1 Schematic diagrams

Figure 1. X-NUCLEO-IHM09M2 circuit schematic



## 2 Board versions

**Table 1. X-NUCLEO-IHM09M2 versions**

PCB version	Schematic diagrams	Bill of materials
X\$NUCLEO-IHM09M2 <sup>(1)</sup>	X\$NUCLEO-IHM09M2 schematic diagrams	X\$NUCLEO-IHM09M2 bill of materials

1. This code identifies the X-NUCLEO-IHM09M2 first version. It is printed on the board PCB.

## Revision history

**Table 2. Document revision history**

Date	Revision	Changes
18-Jul-2022	1	Initial release.

**IMPORTANT NOTICE – 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 acknowledgment.

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, refer to [www.st.com/trademarks](http://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.

© 2022 STMicroelectronics – All rights reserved