

Data brief

## Motor control connector expansion board for STM32 Nucleo





Product summary		
Motor control connector expansion board for STM32 Nucleo	X-NUCLEO- IHM09M2	
Applications	Motor Control	

#### **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.

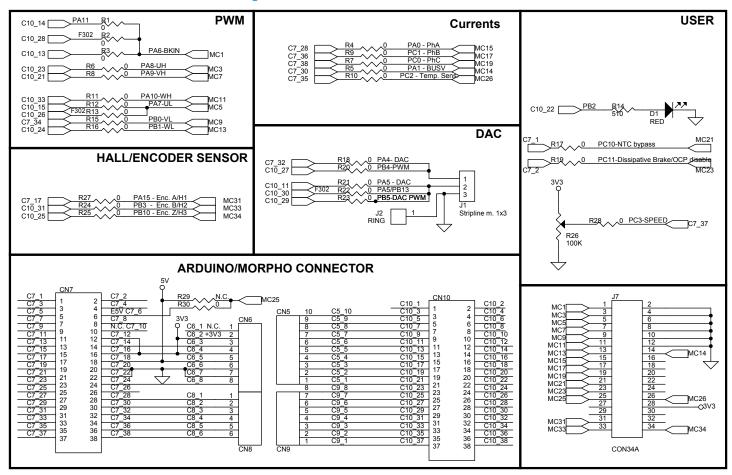
The 34-pin motor control connector is compatible with most ST motor control power boards, which require an external digital section (MCU) to drive a three-phase motor.

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.

## 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 (1)	X\$NUCLEO-IHM09M2 schematic diagrams	X\$NUCLEO-IHM09M2 bill of materials

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

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# **Revision history**

Table 2. Document revision history

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

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