



# STM3210B-MCKIT

## Motor control starter kit

Data brief

### Features

- 24V DC Shinano PMSM 3-phase brushless motor
- Motor control evaluation board featuring
  - 10-Amps 3-phase inverter
  - Single/three shunt-based motor current reading
  - Tacho/hall feedback sensors conditioning
  - On-board switched-mode power supply and wrapping area
- STM32 evaluation board (STM3210B-EVAL) with STM32F103xB device preprogrammed with sensorless PMSM motor control application, motor control connector, color LCD and user controls (push buttons, joystick, potentiometer, etc.)
- Opto-isolation board for galvanic isolation on 20-pin JTAG connection between application boards and development tools
- Segger J-Link USB/JTAG in-circuit debugger/programmer
- USB cable
- Software CD with:
  - PMSM (sensored and sensorless) and AC induction (sensored) software libraries
  - Libraries, user manuals and spreadsheets to customize control parameters of new motors and hardware documentation
  - STM32 data sheet and reference manual

### Description

The STM3210B-MCKIT motor control starter kit provides a complete development platform with all the hardware and software required to get STM32-based motor control applications started quickly, and shortens time to market by allowing developers to apply what they learn in the evaluation phase to real-world applications.



The kit comes ready-to-run with a PMSM motor or an AC induction motor (accessory). You can modify the demonstration application and develop your own motor control applications using the dedicated software libraries provided in the starter kit in conjunction with a third-party IDE and C compiler.

The Segger J-Link is included in the kit for connection to a host PC via an industry standard 20-pin JTAG connection. When connected to a host PC, the opto-isolation board provides galvanic isolation for the host PC and development tools on the 20-pin industry-standard JTAG connection.

**Table 1. Device summary**

| Order code     | Reference                             |
|----------------|---------------------------------------|
| STM3210B-MCKIT | STM32-based motor control starter kit |

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## Revision history

**Table 2. Document revision history**

| Date         | Revision | Changes          |
|--------------|----------|------------------|
| 17-Sept-2010 | 1        | Initial release. |

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