

### X-NUCLEO-IHM12A1

# Low voltage dual brush DC motor driver expansion board based on STSPIN240 for STM32 Nucleo

Data brief



## Features

- Low voltage range from 1.8 V to 10 V
- Current up to 1.3 A r.m.s
- · Current control with adjustable off-time
- Full protection overcurrent and short-circuit protection
- Low R<sub>DS</sub>(ON) power stage (HS + LS =  $0.4 \Omega$  typ.)
- Thermal shutdown
- Compatible with Arduino UNO R3 connector
- Compatible with STM32 Nucleo boards
- Connection for two independent DC motors
- RoHS compliant

#### **Description**

The X-NUCLEO-IHM12A1 is a low voltage dual brush DC motor driver expansion board based on the STSPIN240 for STM32 Nucleo.

It provides an affordable and easy-to-use solution for the implementation of portable motor driving applications such as thermal printers, robotics and toys.

Thanks to its programmable current limiter and complete set of protection features, it offers high levels of performance and robustness.

The X-NUCLEO-IHM12A1 is compatible with the Arduino UNO R3 connector and most STM32 Nucleo boards.



Schematic diagram X-NUCLEO-IHM12A1

### 1 Schematic diagram

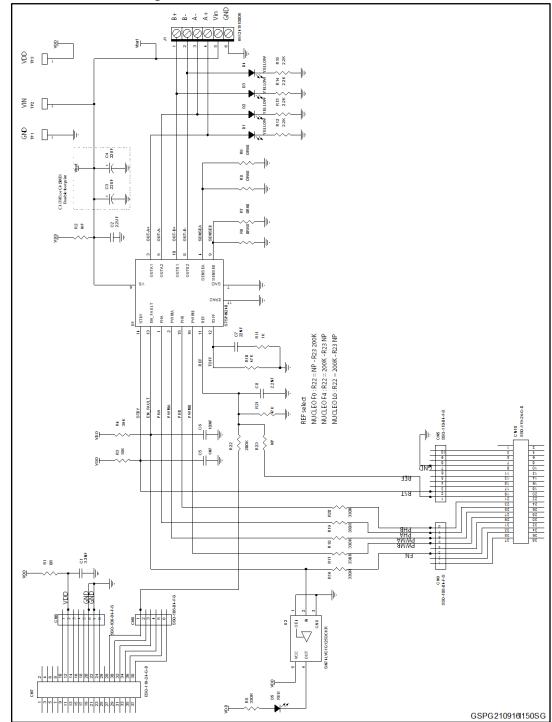


Figure 1: X-NUCLEO-IHM12A1 circuit schematic



X-NUCLEO-IHM12A1 Revision history

# 2 Revision history

Table 1: Document revision history

Date	Version	Changes
27-Sep-2016	1	Initial release.

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