

Data brief

# Dual brush DC motor driver expansion board based on STSPIN840 for STM32 Nucleo







Product summary		
Dual brush DC motor driver expansion board based on STSPIN840 for STM32 Nucleo	X-NUCLEO-IHM15A1	
Dual brush DC motor driver	STSPIN840	
STM32 Nucleo development board	STM32 Nucleo	

#### **Features**

- Voltage range from 7 to 45 V
- Output current up to 1.5 A<sub>rms</sub> for each motor
- · Two independent current limiters with adjustable OFF time
- Full protection set including: overcurrent, short-circuit, under voltage lock out and thermal shutdown
- Parallel operation
- · Compatible with Arduino UNO R3 connector
- Compatible with STM32 Nucleo boards

### **Description**

The X-NUCLEO-IHM15A1 dual brush DC motor driver expansion board is based on the STSPIN840 for STM32 Nucleo.

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

Thanks to the parallel operation, it can be easily converted to a single brush DC driver with double current capability.

The current limiters and complete set of protection features make it suitable for rugged applications.

The X-NUCLEO-IHM15A1 is compatible with the Arduino UNO R3 connector and most STM32 Nucleo boards.



## X-NUCLEO-IHM15A1 schematic diagram

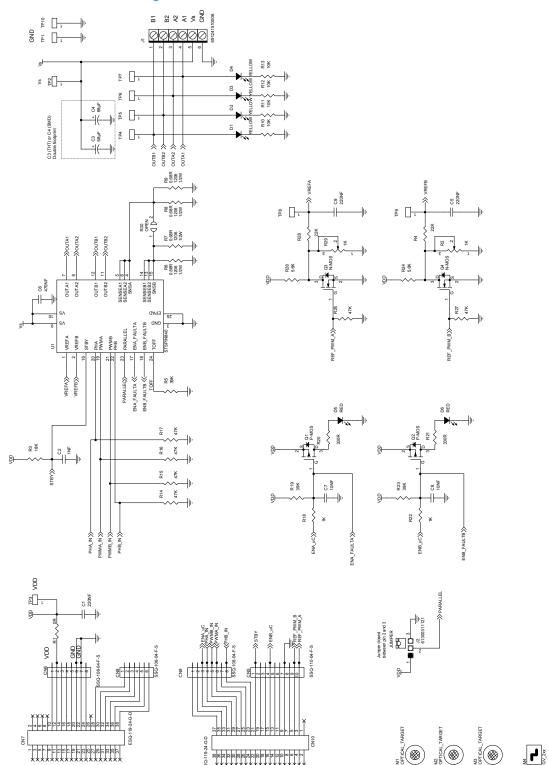


Figure 1. X-NUCLEO-IHM15A1 circuit schematic

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### **Revision history**

**Table 1. Document revision history** 

Date	Version	Changes
16-May-2018	1	Initial release.

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