X-NUCLEO-IHM15A1

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

Features
- Voltage range from 7 to 45 V
- Output current up to 1.5 A_{rms} 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.

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<th>Product summary</th>
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<td>Dual brush DC motor driver expansion board based on STSPIN840 for STM32 Nucleo</td>
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<tr>
<td>Dual brush DC motor driver</td>
<td>STSPIN840</td>
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<td>STM32 Nucleo development board</td>
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Figure 1. X-NUCLEO-IHM15A1 circuit schematic
# Revision history

**Table 1: Document revision history**

<table>
<thead>
<tr>
<th>Date</th>
<th>Version</th>
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<tr>
<td>16-May-2018</td>
<td>1</td>
<td>Initial release.</td>
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