

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_{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.



X-NUCLEO-IHM15A1 schematic diagram

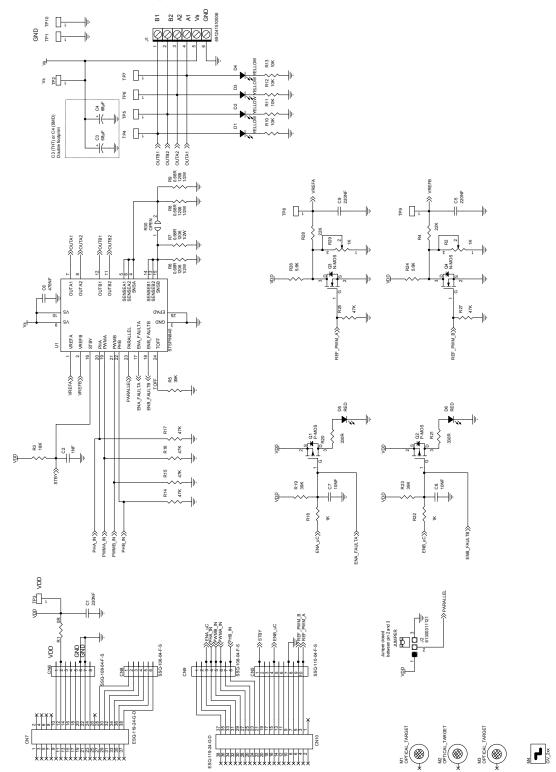


Figure 1. X-NUCLEO-IHM15A1 circuit schematic

DB3576 - Rev 1 page 2/4



Revision history

Table 1. Document revision history

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

DB3576 - Rev 1 page 3/4



IMPORTANT NOTICE - PLEASE READ CAREFULLY

STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers' products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2018 STMicroelectronics - All rights reserved

DB3576 - Rev 1 page 4/4