# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







### Data brief

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



# Product summaryDual brush DC<br/>motor driver<br/>expansion board<br/>based on<br/>STSPIN840 for<br/>STM32 NucleoX-NUCLEO-IHM15A1Dual brush DC<br/>motor driverSTSPIN840STM32 Nucleo<br/>development<br/>boardSTM32 Nucleo

### **Features**

- Voltage range from 7 to 45 V
- Output current up to 1.5 Arms 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.

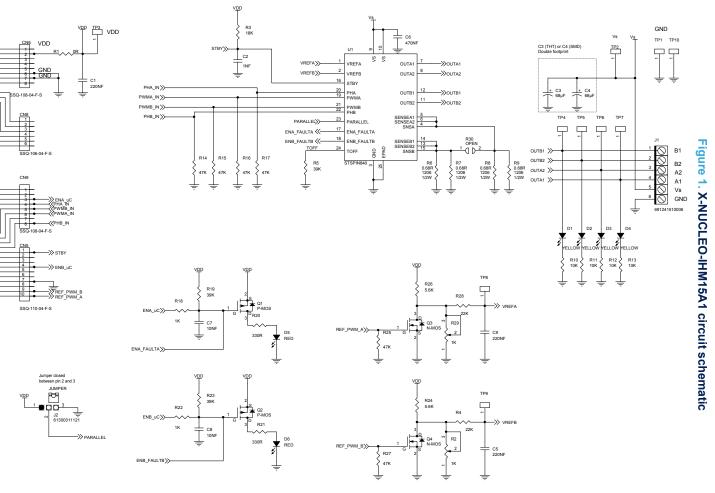
Thanks to the parallel operation, it can be easily converted to a single brush DC driver with double current capability.

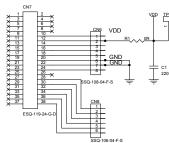
The current limiters and complete set of protection features make it suitable for rugged applications.

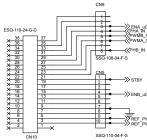
The X-NUCLEO-IHM15A1 is compatible with the Arduino UNO R3 connector and most STM32 Nucleo boards.

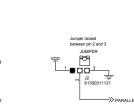
# X-NUCLEO-IHM15A1 schematic diagram

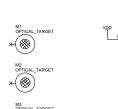
-













GV\_2xx



### **Revision history**

### Table 1. Document revision history

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



### 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