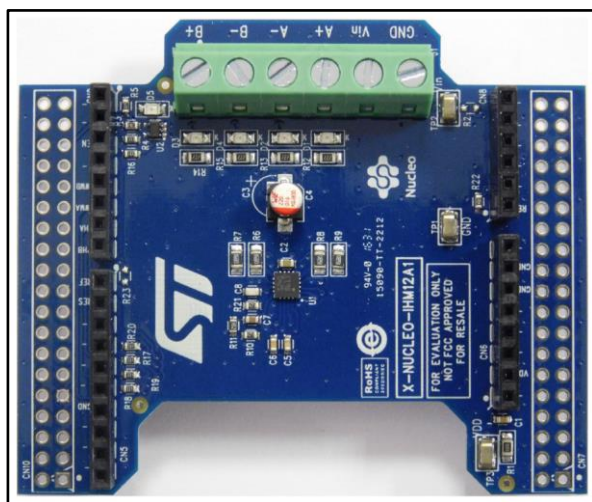


## Low voltage dual brush DC motor driver expansion board based on STSPIN240 for STM32 Nucleo

Data brief



### 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.

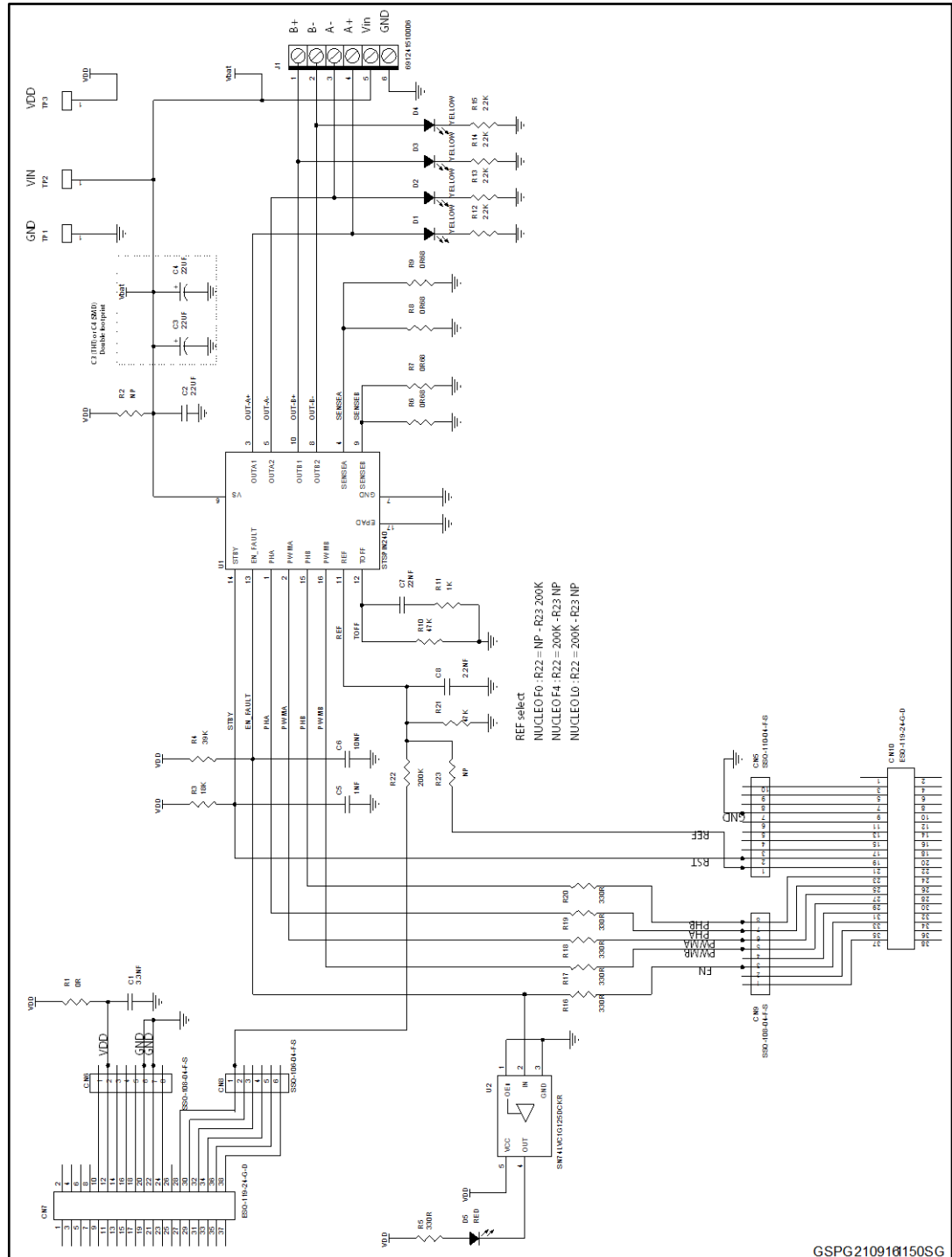
### Features

- 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  $R_{DS(ON)}$  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



# 1 Schematic diagram

Figure 1: X-NUCLEO-IHM12A1 circuit schematic



## 2 Revision history

Table 1: Document revision history

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

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