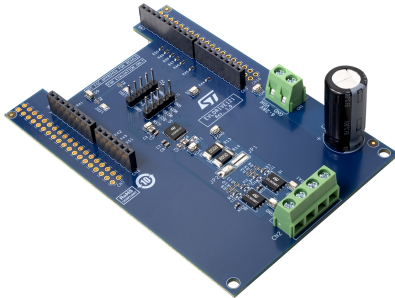


Dual brushed DC motor driver expansion board based on STDRIVE121



Features

- Voltage range from 6 V to 28 V
- Phase current up to 8 A_{RMS} for each motor
- Adaptive MOSFET gate control
- Low consumption mode
- Serial peripheral interface (SPI), 24 bits
- Embedded ADC for VDS sensing
- Full protection set including:
 - VDS monitoring
 - Overvoltage/undervoltage lock-out
 - Overtemperature warning and shutdown
 - Timeout watchdog
- Compatible with Arduino® UNO R3 connector and STM32 Nucleo boards

Description

The **EVLDRIVE121** brushed DC motor driver expansion board is based on the STDRIVE121.

It provides an affordable and easy-to-use solution for the implementation of brushed DC motor driving applications. The EVLDRIVE121 can drive up to two motors. The ADC integrated in the STDRIVE121 allows the sensing of the MOSFET drain-source voltage with a selectable amplification gain. The EVLDRIVE121 is compatible with the Arduino® UNO R3 connector and most STM32 Nucleo boards.

Product status link

[EVLDRIVE121](#)

1 EVLDRI121 schematic diagram

Figure 1. Schematic board 1

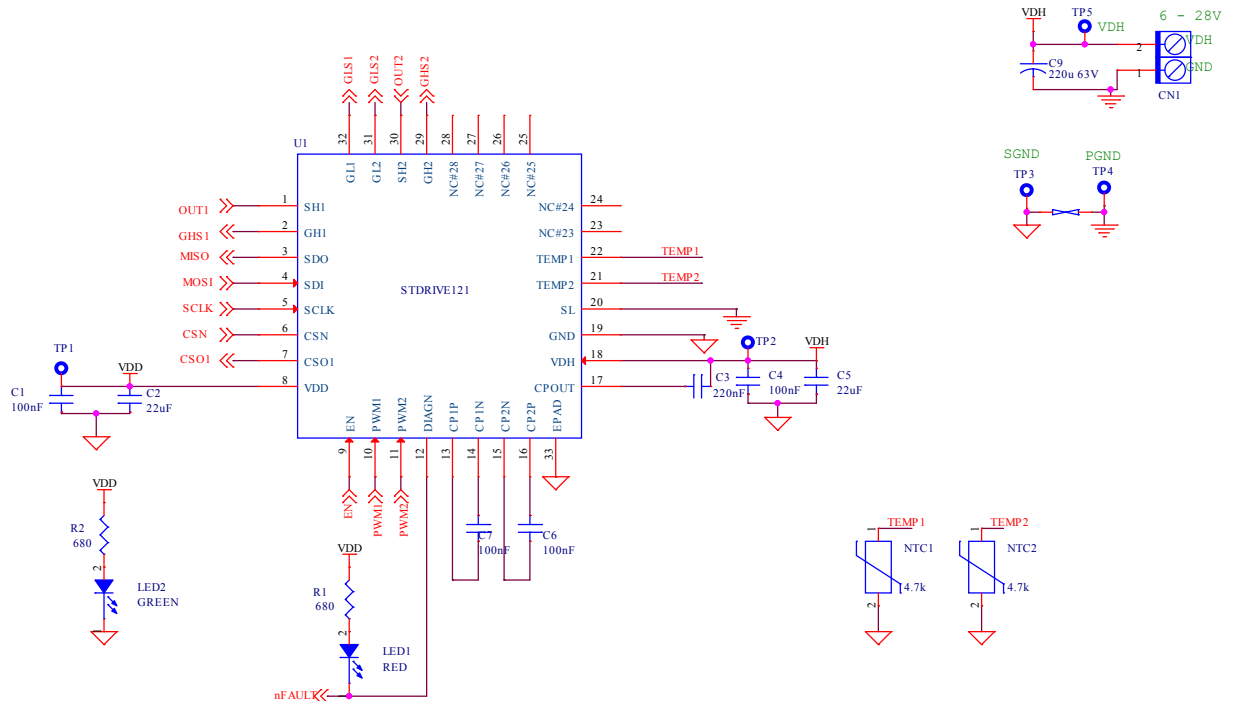


Figure 2. Schematic board 2

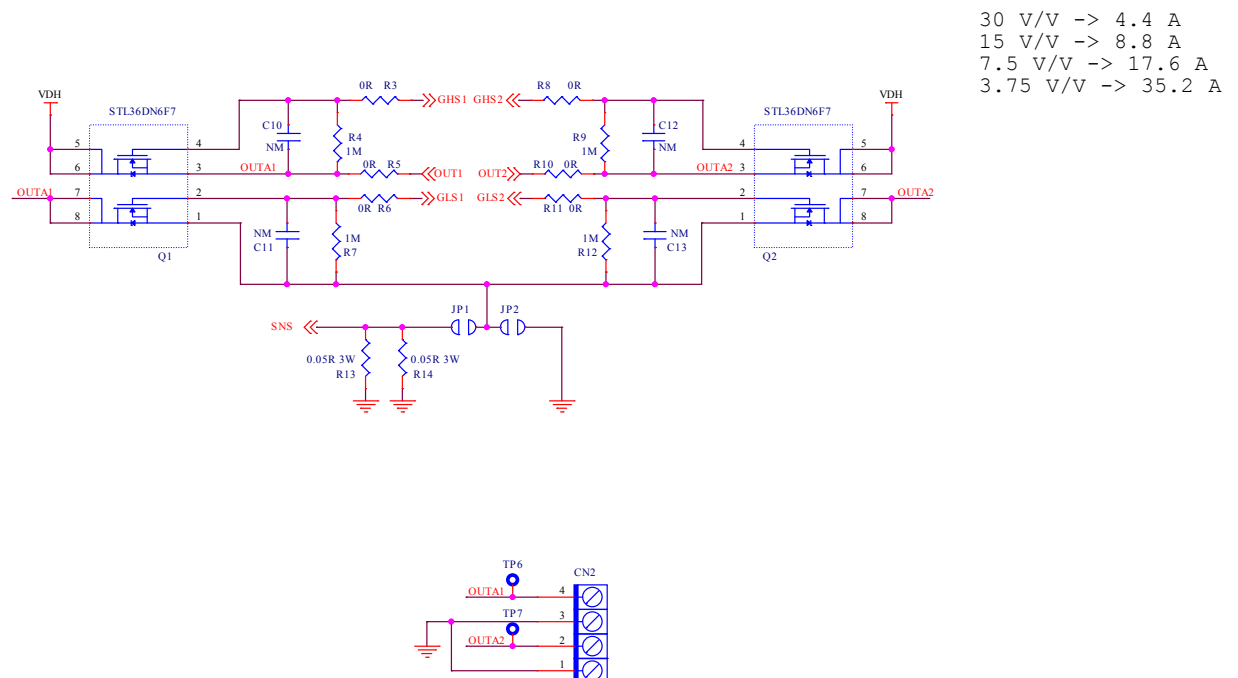
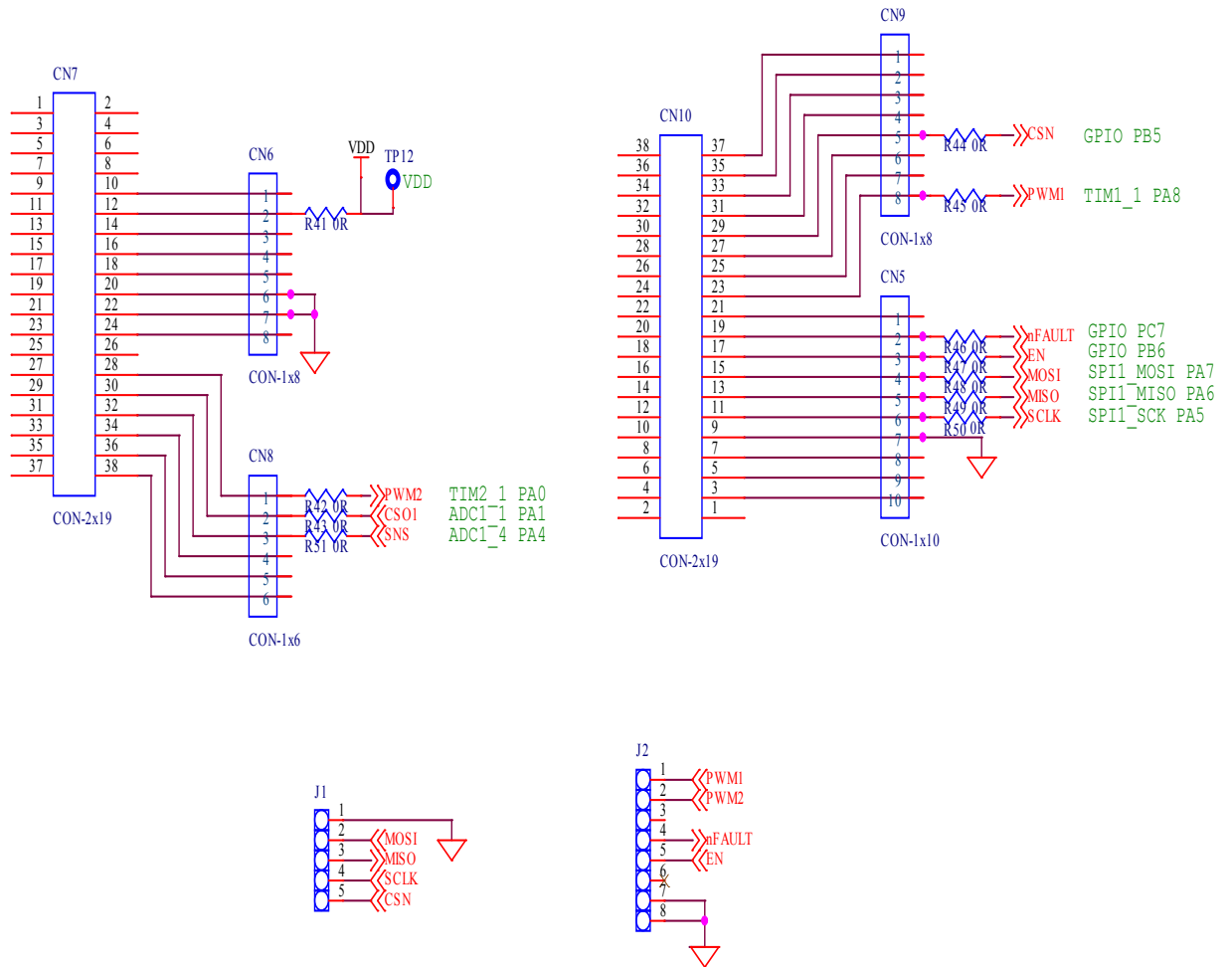


Figure 3. Schematic board 3



Revision history

Table 1. Document revision history

Date	Version	Changes
10-Sep-2026	1	Initial release.

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