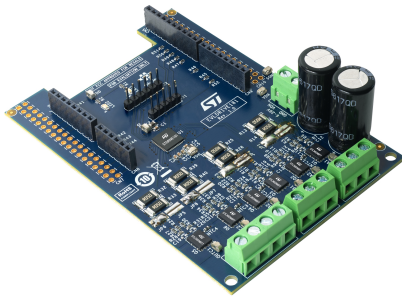


Brushed DC motor driver expansion board based on STDRIVE181, octal half-bridge gate-driver



Features

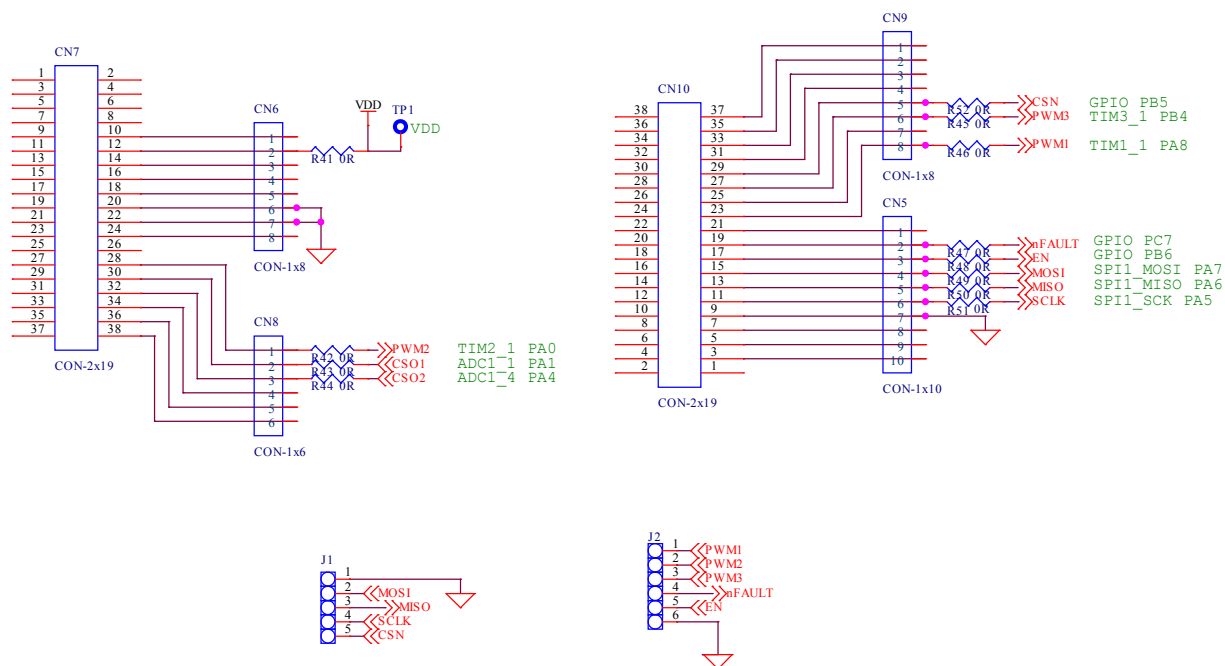
- Voltage range from 6 V to 28 V
- Phase current up to 8 A_{RMS} for each motor
- Adaptive MOSFET gate control
- Low consumption mode
- Serial peripheral interface (SPI), 24 bits
- Embedded ADC for current sensing
- Full protection set includes:
 - VDS monitoring
 - Overvoltage and undervoltage lockout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

Description

The **EVLDRIVE181** brushed DC motor driver expansion board is based on the STDRIVE181.

It provides an affordable and easy-to-use solution for the implementation of brushed DC motor driving applications. The EVLDRIVE181 can drive up to six motors. The ADC integrated in the STDRIVE181 allows the sensing of the current with a selectable amplification gain. The EVLDRIVE181 is compatible with the Arduino® UNO R3 connector and most STM32 Nucleo boards.

Figure 3. Schematic board 3



Revision history

Table 1. Document revision history

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

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