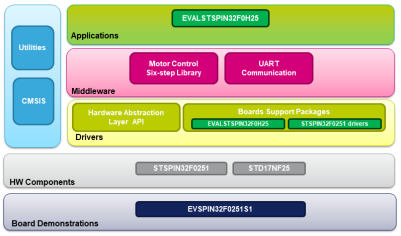
STSW-SPIN32F0251

Data brief

Six-step motor driving library for STSPIN32F0251



Features

- Six-step driving (trapezoidal)
- Speed loop in voltage mode and current mode control
- Supports sensorless driving with Back EMF sensing on both ON and OFF phases
- Supports feedback based on Hall effect
- Native support for EVSPIN32F0251S1 board
- Embedded communication through serial interface
- Based on HAL libraries for STM32

Description

The STSW-SPIN32F0251 firmware package is a motor control example with a library for STSPIN32F0251S1 to implement a six-step driving algorithm for three phase permanent magnet (PMSM) and brushless DC (BLDC) motors.

In combination with the EVSPIN32F0251S1 board, it allows the user to evaluate the STSPIN32F0251 System-in-Package in six-step applications.
Both sensorless (Back EMF sensing) and sensored (Hall-effect sensors) control are supported.

Product summary	
Software package	STSW-SPIN32F0251
Compatible boards	EVSPIN32F0251S1

Revision history

Table 1. **Document revision history**

Date	Version	Changes
03-June-2020	1	Initial release.