
Guidelines for control and customization of power boards with STM32 MC SDK v5.0

Introduction

This document is intended for users wishing to design their own application board to drive a Permanent-Magnet Synchronous Motor (PMSM) starting from an ST Motor Control (MC) board. To this end, it reviews the hardware, the firmware and the related motor control software tools.

For new projects users can start directly with the Motor Control PC software tools provided with the STM32 MC SDK v5.0 (X-CUBE-MCSDK and X-CUBE-MCSDK-FUL).

The following documents, available on www.st.com, are considered as references:

- AN2834: How to get the best ADC accuracy in STM32 microcontrollers
- UM2392: STM32 motor control SDK v5.0.0 firmware
- UM2380: STM32 motor control SDK v5.0 tools



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