



# **S12ZVM high-current BLDC/PMSM Evaluation Board**

## **MCSXSR1CS12ZVM**

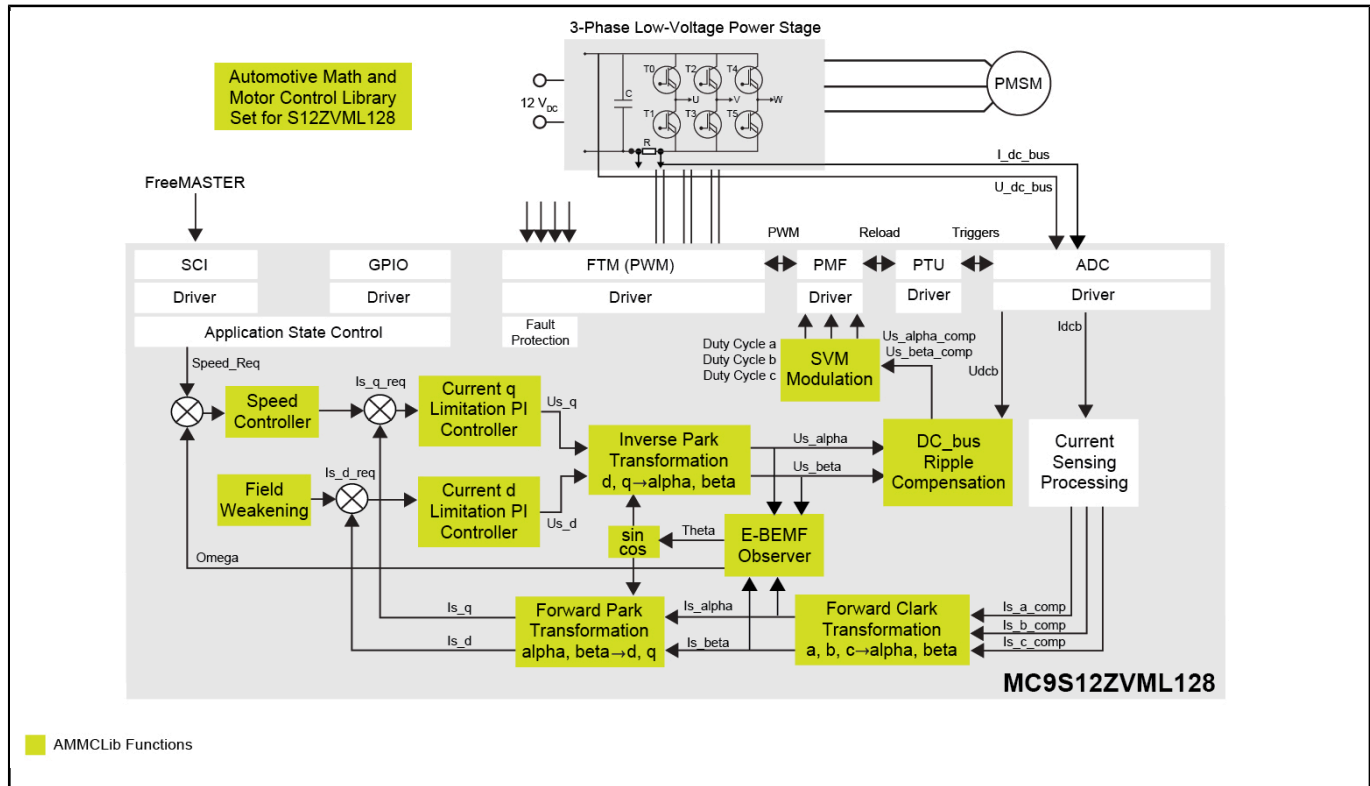
Last Updated: Nov 22, 2023

The MCSXSR1CS12ZVM is an evaluation board engineered for 3-phase brushless direct current (BLDC) and permanent magnet synchronous motor (PMSM) control in high-current applications, featuring automotive connectivity with LIN or CAN, on-board OSBDM debugger with UART-to-USB bridge and various customizable I/O pins.

Based on the 16-bit S12 MagniV® S12ZVM mixed-signal microcontroller, the MCSXSR1CS12ZVM offers high performance 3-phase power stage for PMSM or BLDC motor control in sensorless mode or with Hall or Resolver type of sensors together with DC-link current sensing for 3-phase current reconstruction.

The MCSXSR1CS12ZVM integrates an automotive voltage regulator, a LIN physical interface and a gate driver unit able to drive up to six external MOSFETs.

## Motor Control Algorithm for MCSXSR1CS12ZVM Block Diagram



View additional information for [S12ZVM high-current BLDC/PMSM Evaluation Board](#).

**Note:** The information on this document is subject to change without notice.

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