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.