



Automotive Motor Control Development Solutions

3-Phase Sensorless BLDC Kit with Qorivva MPC5643L MCU

Target Automotive Applications

- Air conditioning units
- Automotive drives
- Compressors
- Fans
- Motor control
- Pumps

Overview

This application is designed for the Qorivva MPC5643L controller board with an encoder/resolver interface and 3-phase BLDC/PMSM low-voltage power stage equipped with a 3-phase MC33937A pre-driver. Beside the main control loop, the DC bus current and DC bus and phase voltages are monitored during the control process for overvoltage, undervoltage and overcurrent drive protection.

Freescale offers a broad portfolio of automotive MCUs, MPUs analog integrated circuits and sensor solutions, along with extensive enablement and technical support, empowering you to create the next breakthrough automotive designs for powertrain, body, chassis and safety, infotainment and telematics, and in-vehicle networking applications.

3-Phase BLDC Development Kit: Qorivva MPC5643L MCU



