

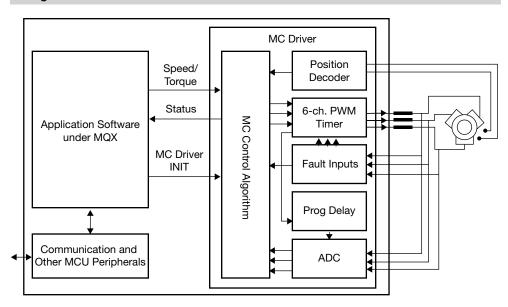
## Motor Control Using MQX™ on MCF5441x

## Overview:

- The MCF5441x is built to drive brushless direct current (BLDC) motor control while maintaining a low power profile
- MQX is a robust, feature-rich, royaltyfree RTOS, provided complimentary with MCF5441x and has an integrated motor control drive
- · Dedicated motor control driver
  - o Calculates MC loops
  - Services integrated peripherals: PWM, ADC, and Timers
- Application software under MQX
  - o Calculates speed and torque
  - Enables application control and communications
- MQX tasks are performed in time slots under the supervision of the motor control driver

## **Motor Control Topology** Gate Driver Motor with Isolation Current Position Feedback Feedback **PWM** Generation Control Feedback Algorithm Speed/Torque Processing Command MCF5441x

## Integration of Motor Control into MQX™



Learn More:

For more information about MCF5441X products and documentation, please visit **freescale.com/mcf5441x**.

