

Motor Control Design Based on LPC860 MCUs

MCD-LPC860-MCU

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This motor control reference design based on the LPC860 includes PMSM flux orientation control and BLDC motor commutation control. Leveraging the flextimer and ADC module, LPC860 provides a complete set of peripherals required for motor control that are suitable for home appliance applications with a three-phase motor or multiple DC brushed motors.

The motor control reference design uses the LPCXpresso860-MAX evaluation kit and FRDM motor control development kit, which includes FRDM-MC-LVPMSM and FRDM-MC-BLDC driver board to drive a motor. The controller uses Flextimer (FTM) to generate PWM signal and trigger the ADC to run the motor control algorithm in an interrupt after ADC sampling is completed, leveraging NXP's RECESL control algorithm library.

For more detail, please visit AN14017 and AN14018.

Motor Control Design Block Diagram



View additional information for Motor Control Design Based on LPC860 MCUs.

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

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