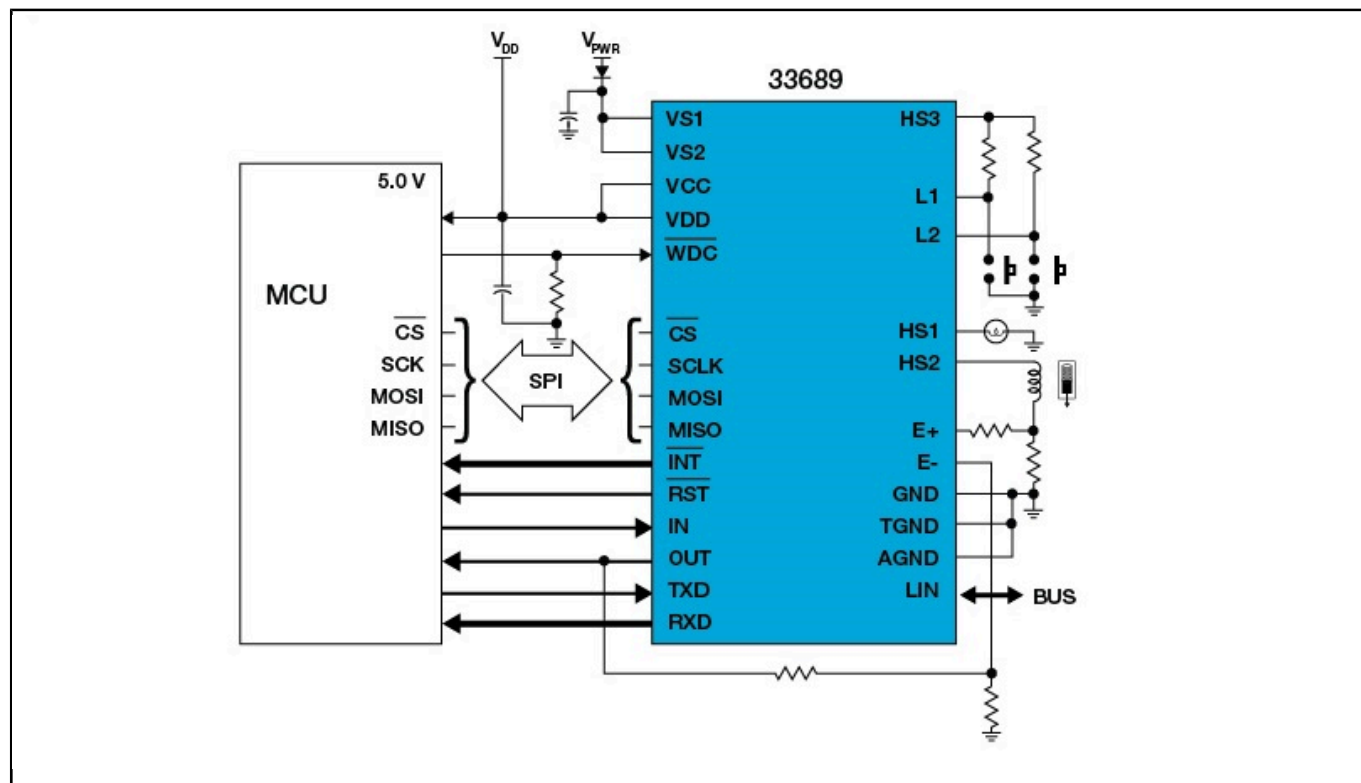# System Basis Chip with LIN

MC33689

Last Updated: Jun 17, 2025

The NXP® MC33689 is a serial peripheral interface (SPI) controlled system basis chip that combines frequently used functions in an MCU-based system with a LIN transceiver. Applications include power window, mirror, and seat controls.

- 5.0 V, 50 mA low dropout regulator with full protection and reporting features
- Full SPI readable diagnostics and a selectable timing watchdog for detecting errant operation
- Three operational modes: Normal (all functions available), Sleep (VDD OFF, wake-up via LIN bus or wake-up inputs), and Stop (VDD ON, wake-up via MCU, LIN bus, or wake-up inputs)

MC33689 Simplified Application Block Diagram Block Diagram

View additional information for System Basis Chip with LIN.

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