



# One-Wheel Antilock Braking (ABS) Controller for Scooter / Moped

## SB0401

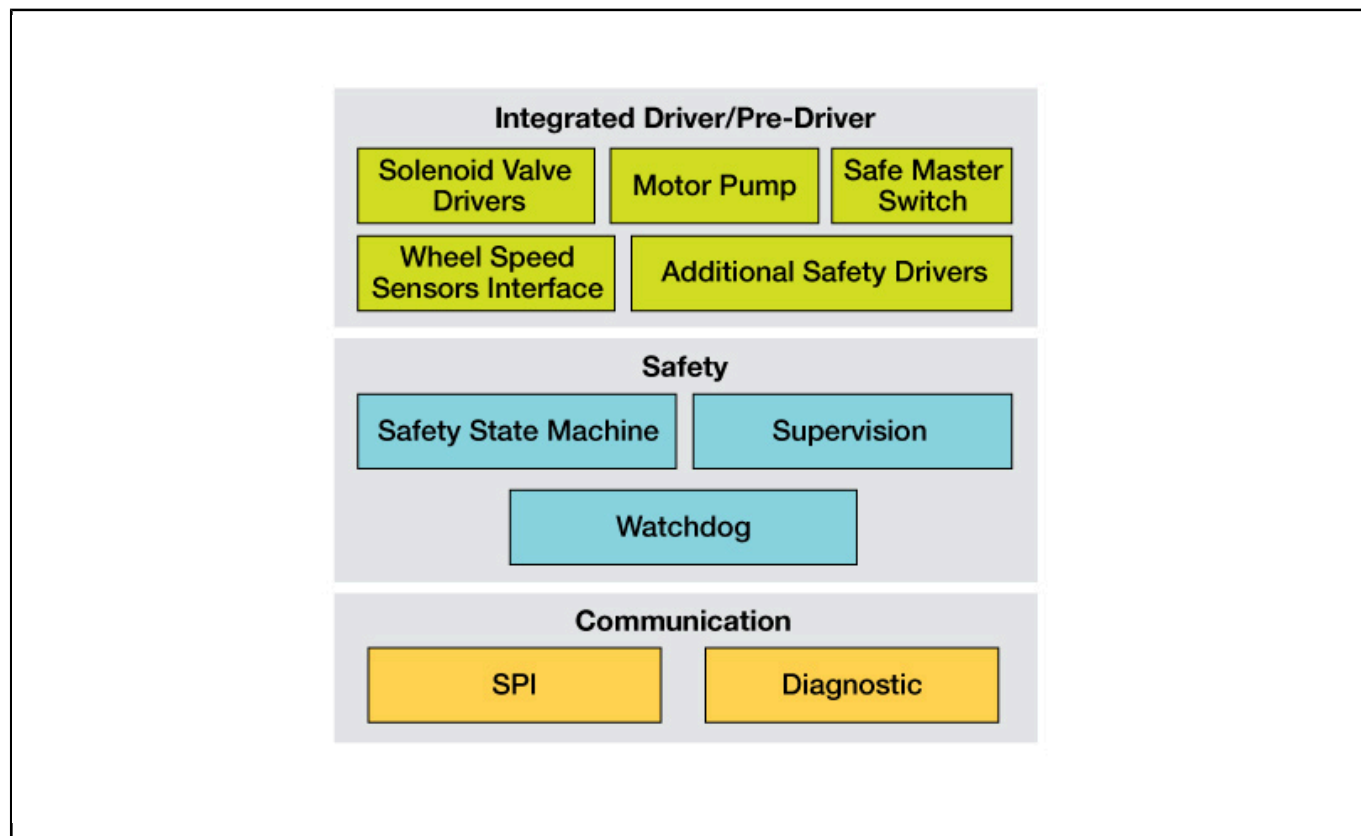
Last Updated: Jun 17, 2025

Anti-lock braking systems (ABS) reduce accidents and save lives. This is well-known and proven for 4-wheel vehicles. Although not nearly as widely implemented as on 4-wheel vehicles, 2-wheeled motorcycles and scooters have increasing reasons for ABS implementation.

- The MC33SB0401 device is an antilock brake controllers designed for Motorcycle/Scooter. The MC33SB0401 is dedicated for the one channel ABS version.
- This antilock brake controller integrates two low side drivers with a low RDs (on) for solenoid valves, configurable wheel speed sensor interfaces for active sensors, a safe switch and finally a DC motor Pump controller.
- MC33SB0401 also has a warning lamp driver and a K-line transceiver. An internal charge pump allows the high-side drivers to use inexpensive N-channel MOSFETs.

For additional information and sample availability, contact your local NXP® Sales Office.

## SB0400/SB0401: Functional Internal Block Diagram



View additional information for [One-Wheel Antilock Braking \(ABS\) Controller for Scooter / Moped](#).

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

**www.nxp.com**

NXP and the NXP logo are trademarks of NXP B.V. All other product or service names are the property of their respective owners. The related technology may be protected by any or all of patents, copyrights, designs and trade secrets. All rights reserved. © 2025 NXP B.V.