



# Battery Sensor with CAN and LIN

## MM9Z1\_638

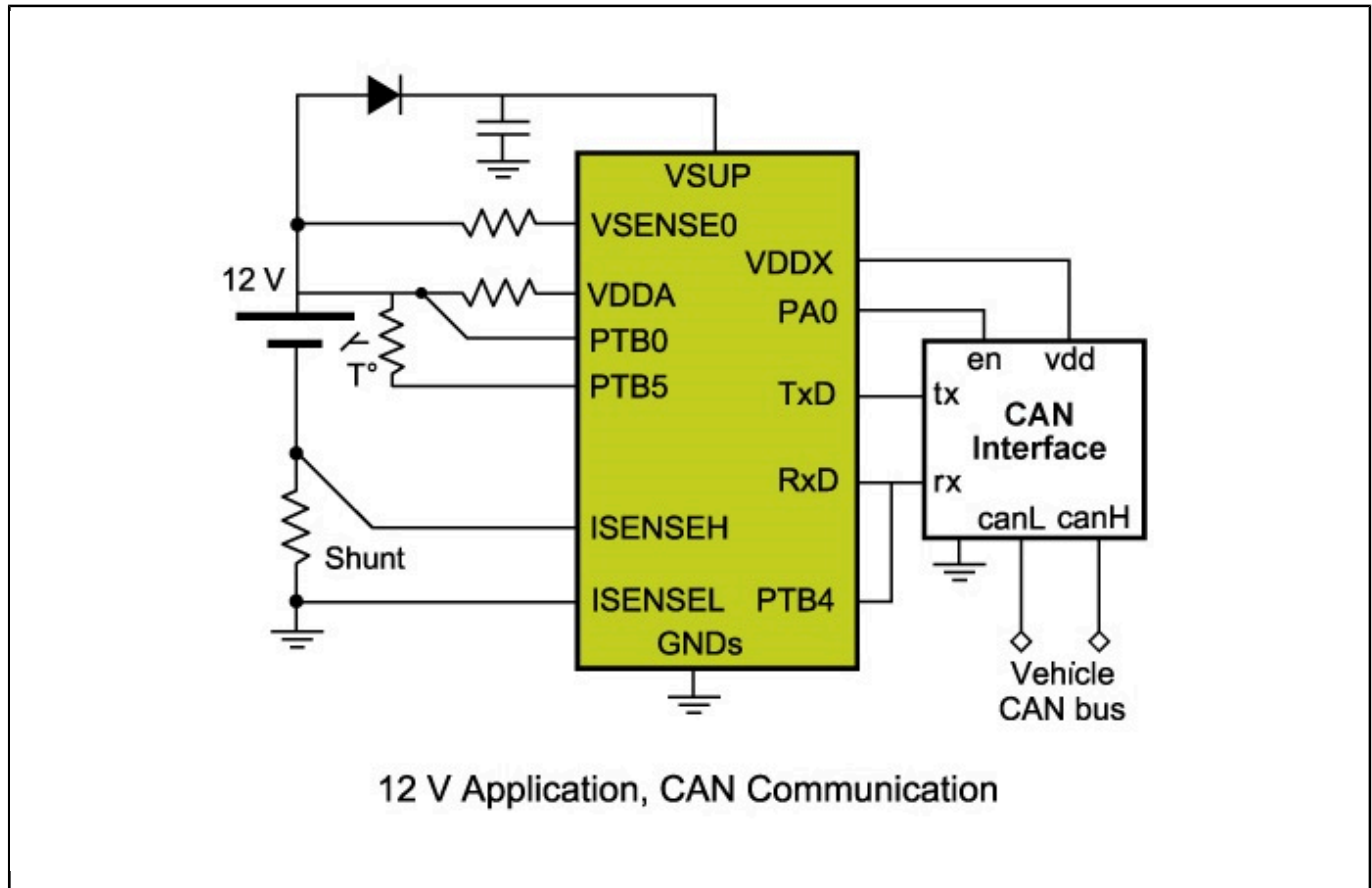
Last Updated: Dec 24, 2025

MM9Z1J638BM2EP and MM9Z1I638BM2EP are no longer recommended for new designs. Kindly refer to compatible replacement parts MM9Z1J638TM5EP and MM9Z1I638TM5EP.

The NXP MM9Z1\_638 is a fully integrated battery monitoring device, featuring:

- Support of precise current measurement via an external shunt resistor
- Four voltage measurement via an internal calibrated resistor divider or use of an external divider
- An internal temperature sensor, allowing close proximity battery temperature measurements, plus four external temperature sensor inputs
- LIN 2.2 protocol and physical interface and an MSCAN protocol controller for interfacing to automotive buses

## MM9Z1 Block Diagram



View additional information for [Battery Sensor with CAN and LIN](#).

**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. © 2026 NXP B.V.