



Isolated Network High-Speed Transceiver

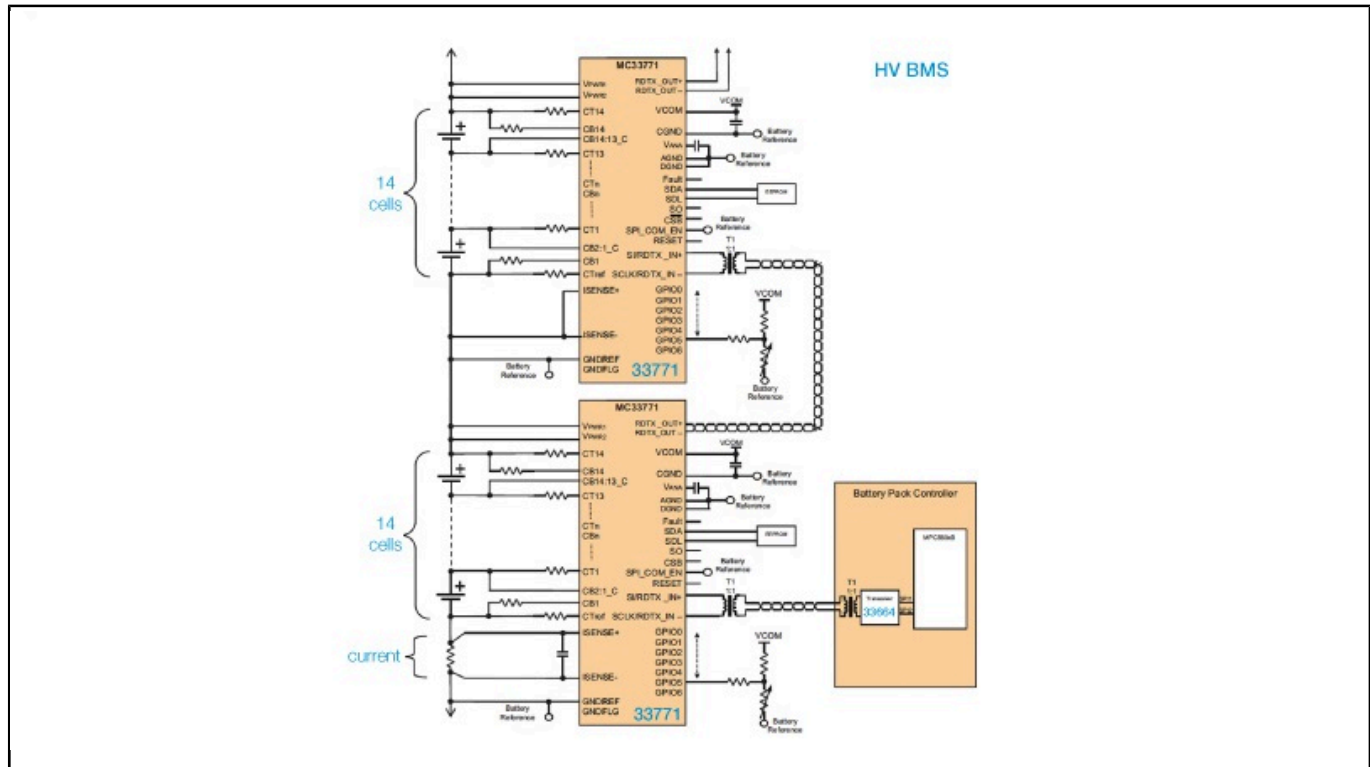
MC33664

Last Updated: Jun 17, 2025

Our MC33664 is a transceiver physical layer transformer driver designed to conveniently interface a microcontroller to a high speed isolated communication network. MCU SPI data bits are directly converted to pulse bit information and transferred to the bus network.

- Follower response messages use the same structure to send pulse bit information to the MC33664 which is then converted to an SPI bit stream sent back to the MCU. This device is powered by SMARTMOS® technology.
- The MC33664 is designed for automotive and industrial applications and is compliant with the MC3377x battery cell controller family and MPC5xxx MCU families.

MC33771 and MC33664 High-Voltage Battery Management System Block Diagram



View additional information for [Isolated Network High-Speed Transceiver](#).

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.