



High-Speed CAN Transceiver

TJA1050

Last Updated: Dec 24, 2025

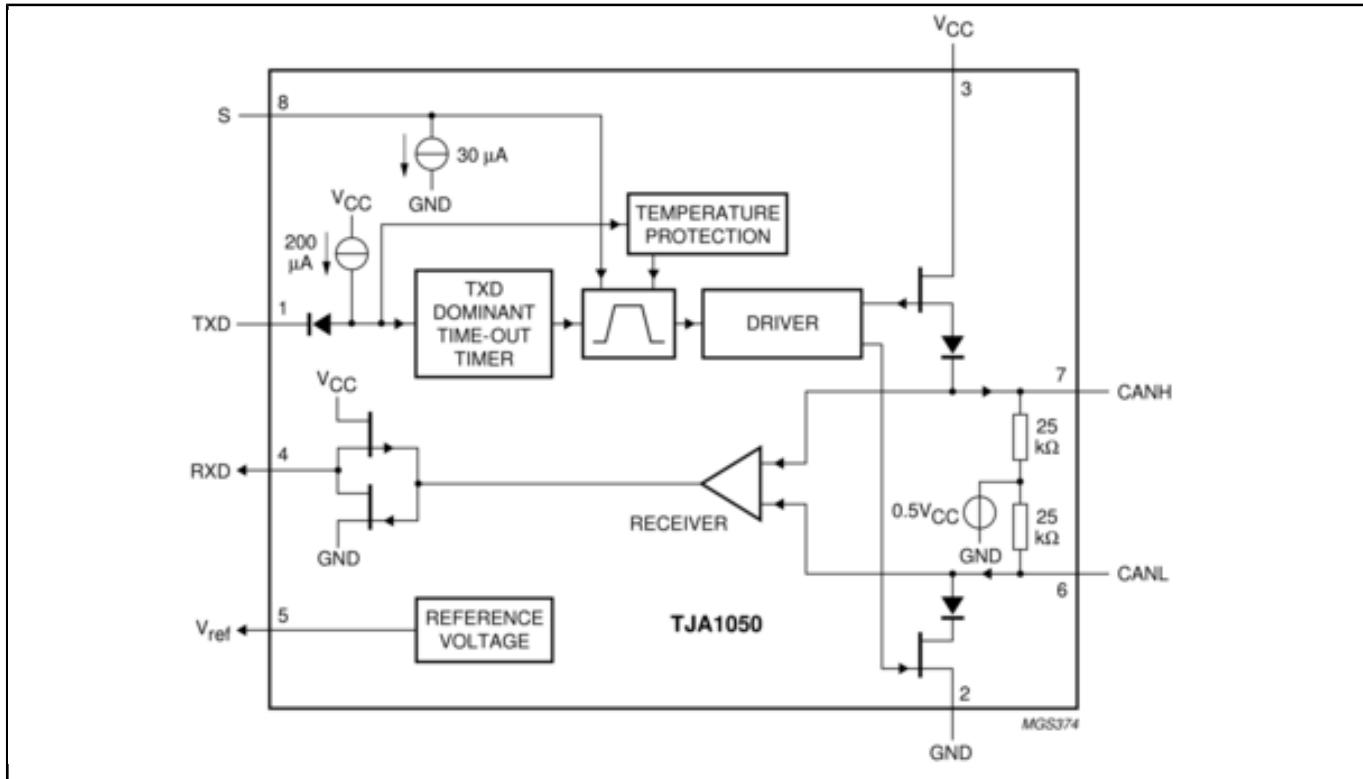
The TJA1050 is the interface between the controller area network (CAN) protocol controller and the physical bus. The device provides differential transmit capability to the bus and differential receive capability to the CAN controller.

The TJA1050 is the third Philips high-speed CAN transceiver after the PCA82C250 and the PCA82C251. The most important differences are:

- Much lower electromagnetic emission due to optimal matching of the output signals CANH and CANL
- Improved behavior in case of an unpowered node
- No standby mode

This makes the TJA1050 eminently suitable for use in nodes that are in a power down situation in partially powered networks.

TJA1050T Block Diagram



[View additional information for High-Speed CAN 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. © 2026 NXP B.V.