



FlexRay Communication Controller

MFR4310

Not Recommended for New Designs

This page contains information on a product that is not recommended for new designs.

Last Updated: Apr 9, 2022

FlexRay™ networking is a next-generation automotive communication protocol featuring high bandwidth, determinism, and fault tolerance.

The NXP® MFR4310 stand-alone FlexRay controller eases the integration of FlexRay communication in applications using MCUs without an embedded FlexRay controller.

- Provides high-speed deterministic distributed control for advanced automotive applications
- Communicates directly with the S12X family of 16-bit MCUs, and the MPC500 and MPC5500 families of 32-bit MCUs
- Offers system-wide redundancy to meet reliability requirements of emerging safety systems
- Complies with FlexRay Consortium Specification v2.1A

MFR4310BLKDIAG Block Diagram

Voltage Regulator

Oscillator

Clk+Res Mod

Ext Clk Int

Asynchronous
Interface

S12
Interface

FlexRay™
Host Interface

Receiver A

Receiver B

Transmitter A

Transmitter B

View additional information for [FlexRay Communication Controller](#).

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. © 2024 NXP B.V.