FLEXRAY™ TRANSCEIVER E910.54

Features

- Part of the FlexRay™ electrical, physical layer
- Interface between the communication controller and the transfer medium (twisted pair bus line)
- Support of data rates up to 10 Mbit/s
- Enhanced diagnosis capability provided via SPI with interrupt generation
- Protection against overload damage by current limitation and overtemperature detection
- Bus driver outputs withstand - 27 V / + 40 V DC voltage
- Low EME due to balanced differential transmission

Brief Functional Description

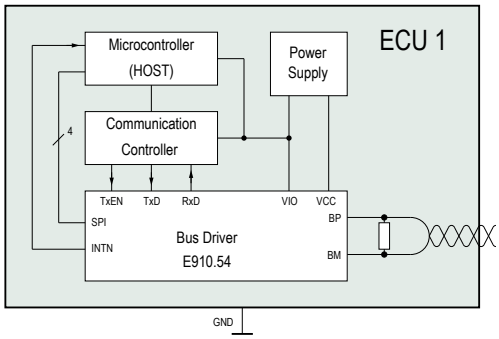
The low cost basic FlexRay™ transceiver is part of the electrical, physical layer in a FlexRay™ communication network. The E910.54 provides an interface between the twisted pair physical bus medium and a communication controller (CC). An SPI interface connects the bus driver (BD) to a host controller (HOST) to provide status information concerning failure detection on the bus lines (e.g. short-circuits, ground loss) and overtemperature condition. An interrupt signal is generated whenever the failure status changes.

Applications

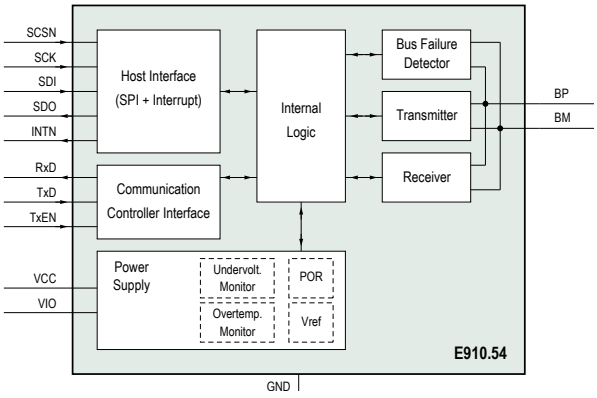
- Transceiver in FlexRay™ nodes (ECUs)

ELMOS is member of the FlexRay consortium

Typical Application



Blockdiagram



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