

Features

- ▶ Part of the FlexRay™ electrical, physical layer
- ▶ Interface between communication controller and physical medium (twisted pair bus line)
- ▶ Support of data rates up to 10 Mbit/s
- ▶ Support of low power mode for an ECU
- ▶ Remote wake-up via bus line
- ▶ Enhanced diagnosis capability 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

Applications

- ▶ Transceiver in FlexRay™ nodes (ECUs)

Brief Functional Description

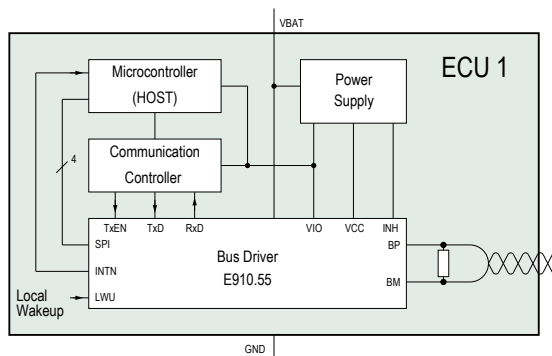
The low cost bus driver is a part of the electrical, physical layer in a FlexRay™ communication network. The E910.55 provides an interface between the twisted pair physical bus medium and a communication controller (CC). An SPI interface connects the bus driver (BD) to a host controller (HOST) to provide 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.

The device supports normal and standby modes and provides remote wake up capability via bus line. The output (INH) can be used to control an external voltage regulator.

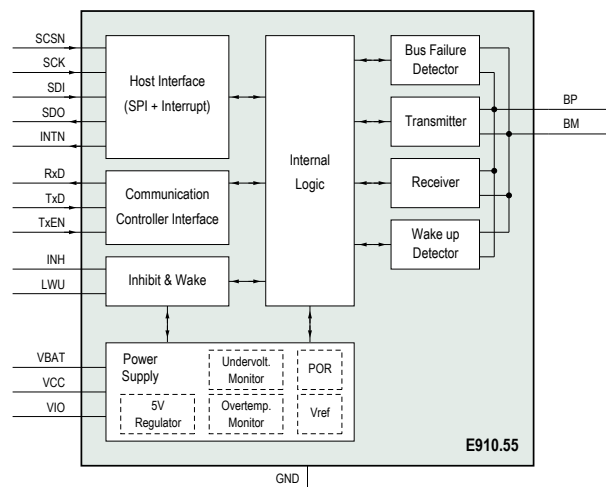


ELMOS is member of the FlexRay consortium

Typical Application



Blockdiagram



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