FLEXRAY™ ACTIVE STAR DEVICE

E981.57

PRODUCTION DATA - JUN 12, 2012

RoHS compliant

Features

- Enhanced Active Star Device with new features
- Compliant to FlexRay™ electrical physical layer v3.0
- 2 branches for coupling of 2 FlexRay™ buses (extensible by banking of active star devices)
- Transmitter control by bus guardian interface (BGE)
- Short circuit and over temperature protection
- Low EME due to balanced differential transmission
- Automotive qualified according to AEC-Q100
- Support of two low power modes and wake-up
- Support of data rates up to 10 Mbit/s
- Control and diagnosis via SPI™

General Description

The star coupler is part of the electrical, physical layer in a FlexRay™ communication network. The E981.57 provides interfaces to connect up to two branches of twisted pair physical bus lines to other bus drivers or star couplers. It also interfaces with a communication controller (CC). Via SPI the bus driver (BD) provides status information concerning failure detection on the bus lines (e.g. short circuit) and over temperature condition to a host controller (HOST). An interrupt signal is generated whenever the failure status changes. The device supports normal and low power mode and provides remote wake-up capability via bus line. The output INH can be used to control an external voltage regulator.

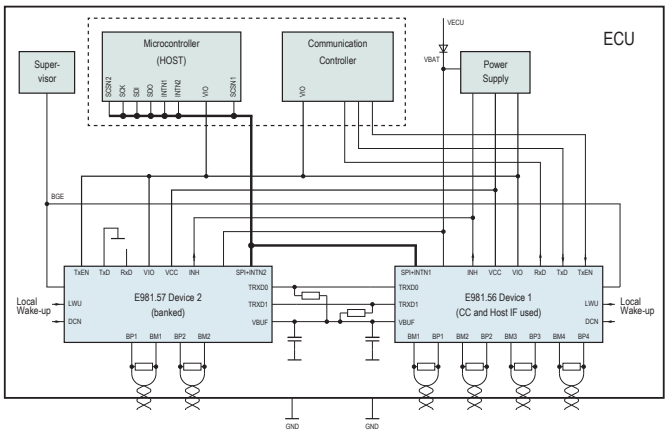
Applications

- Star coupler and additionally usable as transceiver in FlexRay™ nodes (ECUs)

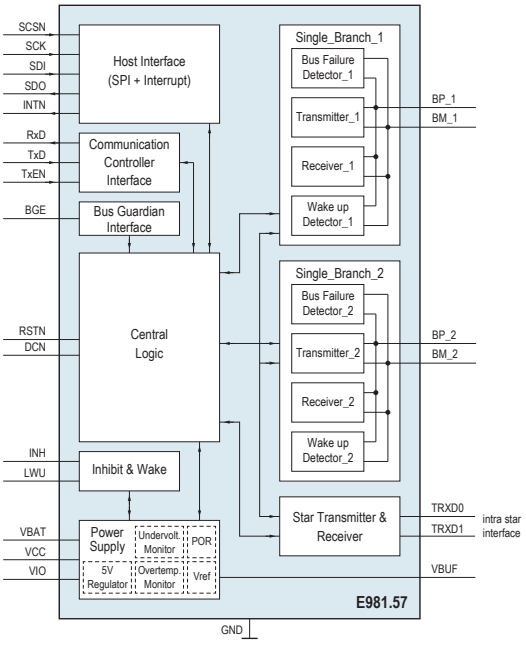
Ordering Information

Product ID	Temp. Range	Package
E981.57	-40°C to +125°C	QFN44L9

Typical Applications Circuit



Blockdiagram



FlexRay™

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