

Features

- ▶ Enhanced Active Star Device with new features
- ▶ Downward compatible to E910.56B
- ▶ Compliant to FlexRay™ electrical physical layer V3.0.1
- ▶ 4 branches for coupling up to 4 FlexRay™ buses (extensible by banking of active star devices)
- ▶ Transmitter control by bus guardian interface
- ▶ Additional CC and host interface
- ▶ Supports data rates up to 10 Mbit/s
- ▶ Supports two low power modes and wake-up
- ▶ Fast forwarding of wake-up frames
- ▶ Control and diagnosis via SPI™

Applications

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

General Description

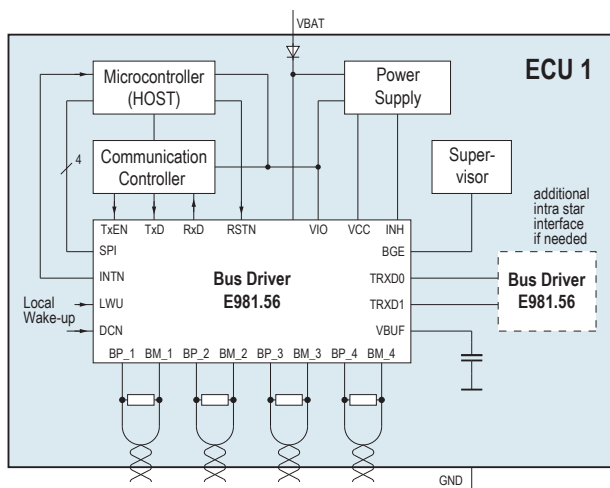
The star coupler is part of the electrical, physical layer in a FlexRay™ communication network. The E981.56 provides interfaces to connect up to four branches of twisted pair physical bus lines to other bus drivers or star couplers. It also interfaces with a communication controller (CC). Via SPI the bus driver (BD) provides status information concerning failure detection on the bus lines (e.g. short circuit, ground loss) and over temperature condition to a host controller (HOST). An interrupt signal is generated whenever the failure status changes.

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

Ordering Information

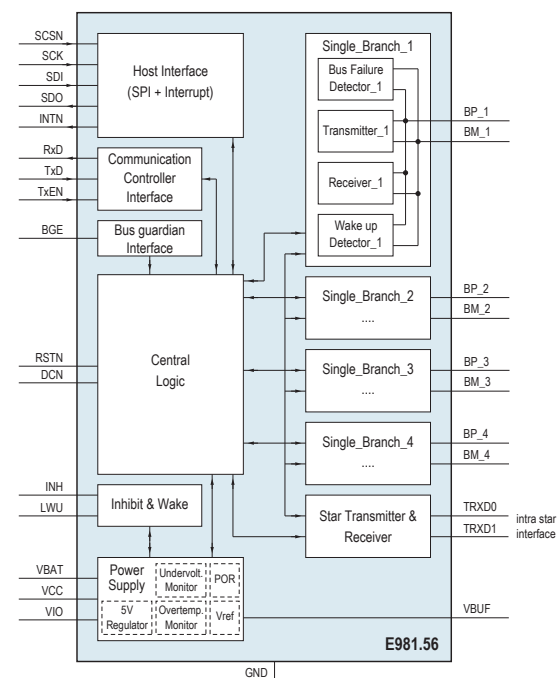
Product ID	Temp. Range	Package
E981.56	-40°C to +125°C	QFN44L9

Typical Application



FlexRay™ and FlexRay are trademarks of Daimler AG

Blockdiagram



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