► LIN- / K-Bus transceiver

E910.15

FEATURES

- Supply voltage range VS 6V to 18V
- Logic supply voltage range VDD 4.5V to 5.5V
- Data rate up to 20kBaud for LIN-mode
- Data rate up to 9.600Baud for K-mode
- Change between LIN-mode and K-mode with external pin
- Internal monitoring features
- Output driver with slewrate control (EMI)
- Very low standby current (15µA typical)
- Bus input voltage excursion from −24V to +30V (independent of VS)
- Over temperature protection
- Applicable as diagnostic interface to ISO 9141 and OBD II
- Load-dump and jump-start protected
- −40°C to +125°C operating temperature
- SO8n and SO14n package

APPLICATION

- Automotive bus systems
- Body electronics
- Comfort electronics

DESCRIPTION

The IC is designed to control bidirectional serial data transmission on bus lines. It supports both LIN- and K-Bus which are selected by the MODE pin. This feature allows an easy migration from K- to LIN-bus without changing the transceiver.

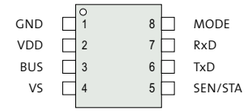
The high voltage range and the low standby current as well as the wide temperature range make the IC interesting for a wide field of applications.

An implemented over temperature protection disables the bus driver to prevent damages. Bus voltage excursions from -24V to +30V ensures easy board protection.

PINNING

Pin	Name	Description
1	GND	Ground
2	VDD	+5V supply
3	BUS	Bus driver output, active low and receiver input
4	VS	+12V supply voltage
5	SEN/STA	I/O pin send status
6	TxD	Serial data from µC to IC
7	RxD	Serial data from IC to µC
8	MODE	Mode = “1” = not connected: K-Bus-Mode; Mode = “0” : LIN-Bus-Mode

PACKAGE



BLOCK DIAGRAM