► LIN-/K-Bus transceiver

► LIN- / K-Bus transceiver

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 recei			
	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-Mo Mode = "0" : LIN-Bus-Mode			





Note ELMOS Semiconductor AG (below ELMOS) reserves the right to make changes to the product contained in this publication without notice. ELMOS assumes no responsibility for the use of any circuits described herein, conveys no licence under any patent or other right, and makes no representation that the circuits are free of patent infringement. While the information in this publication has been checked, no responsibility, however, is assumed for inaccuracies. ELMOS does not recommend the use of any of its products in life support applications where the failure or mafunction of the product can reasonably be expected to cause failure of a life-support system or to significantly affect its safety or effectiveness. Products are not authorized for use in such applications.

Copyright © 2005 ELMOS Reproduction, in part or whole, without the prior written consent of ELMOS, is prohibited.

E910.15

PACKAGE

GND	0	8	MODE
VDD	2	7 🗖	RxD
BUS	3	6 🗌	TxD
VS	4	5	SEN/STA

eiver input

Aode: