

LIN-BUS-Transceiver with Integrated Voltage Regulator

Features

- Supply voltage range V_S : 5.25 V to 18 V
- LIN-Bus transceiver, 20 kBaud
- Internal monitoring features
- Output driver with slew rate control
- Very low standby current (35 μ A typical)
- Bus-side input voltage excursion from -24 V to +30 V (independent of V_S)
- Wake up function via bus
- Regulator output voltage 5 V, 1.5%, 100 mA
- Reset with two programmable reset times (15 ms and 100 ms) and two reset levels (3.15 V and 4.65 V)
- Undervoltage recognition, fixed threshold at 6.8 and 7.8 V
- Over temperature protection
- Universal comparator with high voltage input
- -40°C to 125°C operating temperature
- SO16 package

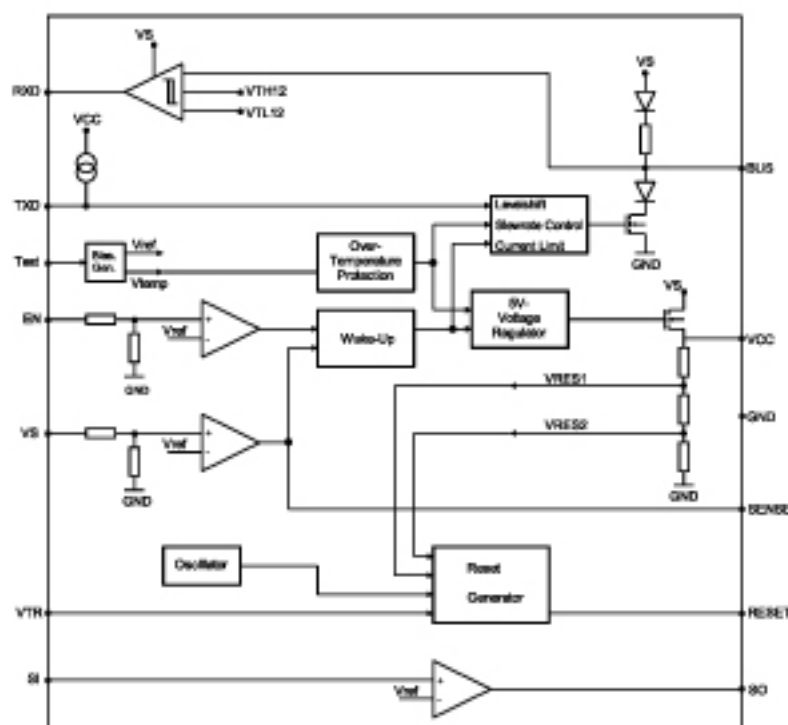
Applications

- Automotive bus systems
- Body electronics
- Comfort electronics

General Description

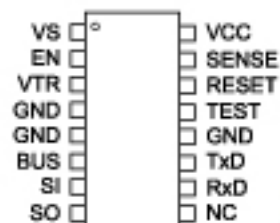
The ELMOS E910.18 is designed to control bidirectional serial data transmission with special standby current-, ambient temperature- and voltage supply requirements. The implemented voltage regulator in combination with the reset function allows a complete power supply for microcontroller including power-on reset and power - down reset. The over temperature protection disables the voltage regulator and the bus driver. After return to normal operation condition a reset function will be generated.

Block Diagram



Package

SO16-pin



Pinning

PIN	Name	Description
1	VS	Positive Supply Voltage
2	EN	Enable Input for VCC
3	VTR	Reset Time and Threshold Select
4	GND	Ground
5	GND	Ground
6	BUS	Send / Receive Pin
7	SI	Universal Comparator Input
8	SO	Universal Comparator Digital Output
9	NC	Not Connected
10	RXD	Serial Data Output
11	TXD	Serial Data Input
12	GND	Ground
13	TEST	Input for Over-Temperature -Test, this Pin has to be connected to GND in the Application!
14	RESET	Reset Output, Active Low
15	SENSE	Input Voltage Monitor
16	VCC	Output 5 V / 100 mA

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ELMOS Semiconductor AG; Heinrich-Hertz-Str. 1; 44227 Dortmund (Germany)

Phone: +49 (0) 231 75 49 0; Fax: +49 (0) 231 75 49 149

E-mail: sales@elmos.de; Web: www.elmos.de

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