elmos

LIN SBC with Voltage Regulator

E521.25

Production Data - Jan 27, 2022

Features

- LIN transceiver, V2.1, V2.2 SAE-J2602, ISO9141
- Operating range VS 5V up to 18V
- Limited functional range 3.8V up to 40V
- typ. 10µA sleep current consumption
- Very low BUS leakage current
- Reset generation
- µC window watchdog (QFN-version only)
- Internal 1:6 Voltage Divider for VBAT Sensing (QFN-version only)
- Two versions available with 3.3V or 5.0V (±2%) in active, (±5%) in standby mode
- VDD switched off in sleep mode
- Peripheral supply up to 100mA
- On chip over temperature protection
- BUS pin ESD-protected 8kV according to IEC61000-4-2
- Very good EMC performance (OEM requirements fulfilled)
- package QFN20L5 or S08-EP

Added value factors

- Flash mode
- Switchable BUS pull up path
- TXD permanent dominant timeout
- Adjustable watchdog cycle time
- Extended first open window after power up
- Watchdog debugging mode
- Fail save system with only 50µA current consumption

General Description

The LIN-SBC with voltage regulator provides beside the LIN transceiver the peripheral supply, reset generation for the µC and fail-save system.

The LIN SBC can be switched into standby- and sleep-mode which provides very low quiescent current consumption.

The device is capable to detect local and remote wake-up events to enable the voltage regulator. Wake-up can be performed through a high voltage capable WAKE_N input the LIN bus and VS pin.
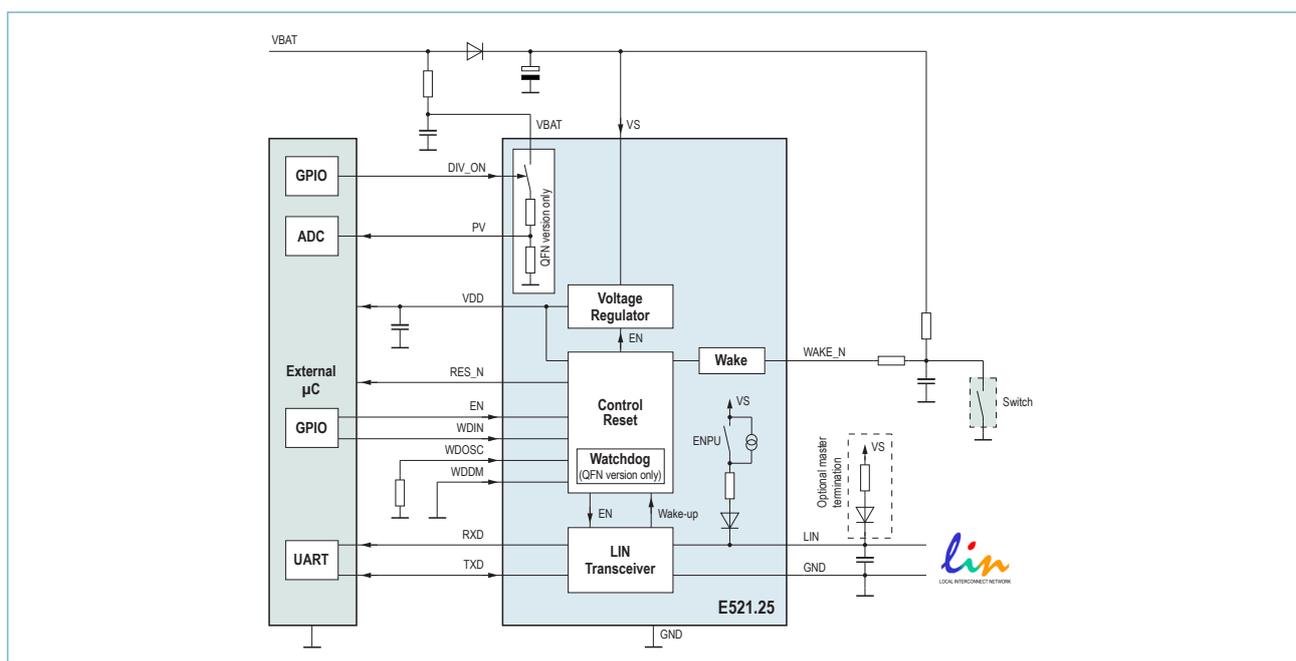
Applications

- Smart applications connected to the LIN bus

Ordering Information

Ordering-No.	Temp Range	Feature	Package
E52125A62CXX2	-40°C to +125°C	3.3V *)	QFN20L5
E52125A80D	-40°C to +125°C	3.3V	SOIC8-EP
E52125B62CXX2	-40°C to +125°C	5V *)	QFN20L5
E52125B80D	-40°C to +125°C	5V	SOIC8-EP

*) with watchdog

Typical Application Circuit

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