

# CAN/LIN SBC FAMILY WITH DC/DC BUCK-BOOST CONVERTER PRELIMINARY INFORMATION - FEB 28, 2013

E521.12/13/14



#### **Features**

- High efficiency 5V DC/DC buck converter
- DC/DC pre-boost converter
- ► Wakeable HS-CAN transceiver (ISO11898-2 and -5)
- ► Up to four LIN transceiver compliant with LIN 2.1, SAE-J2602
- Operating range 3.25V up to 40V
- Typ. 35μA sleep current consumption
- Typ. 120μA standby current consumption with active DC/DC buck converter
- Configurable μC watchdog (cycle time and type)
- ► BUS pins ESD-protected 8kV according to IEC-61000-4-2
- Operating temperature range -40°C to +125°C

# **Applications**

Body control units, gateways

### **General Description**

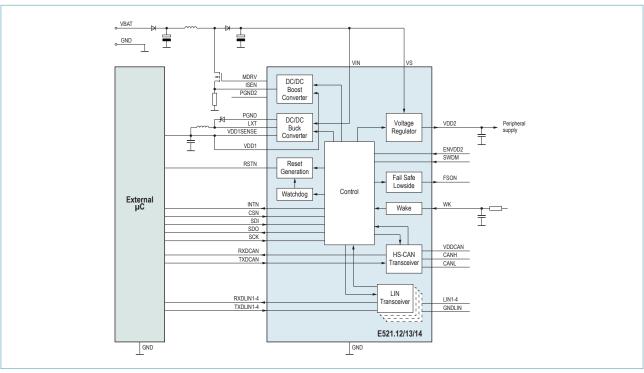
The CAN/LIN SBC family with DC/DC voltage regulator provides beside the CAN and LIN transceivers the main  $\mu\text{C}$  power supply with a high efficiency DC/DC converter. The pre-boost converter provides a stable supply at undervoltage conditions, e.g. cold crank. An additional linear regulator can be used independently as peripheral supply. All supplies are monitored and can signalize a fail event by SPI interface. The main DC/DC supply monitor can generate a  $\mu\text{C}$  reset. System failure can activate a fail-safe output signal for limp home support. The CAN/LIN SBC family provides SLEEP, STOP, ACTIVE and FAILSAFE modes.

The device is capable of detecting local and remote wake-up events which can be individually enabled via SPI.

## **Ordering Information**

Product ID	LIN Transc.	CAN Transc.	Package
E521.12	2	1	QFN44L7
E521.13	3	1	QFN44L7
E521.14	4	1	QFN44L7

# **Typical Application Circuit**



This document contains information on a pre-production product. Elmos Semiconductor AG reserves the right to change specifications and information herein without notice.

# Elmos Support 05/2013

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