

CAN SBC with DC/DC and Highside Switch

Product Preview - Dec 3, 2015

E521.21/23



Features

- DC/DC voltage regulator with current up to 200mA
 - E521.21 3.3V Version or
 - E521.23 5V Version
- Wakeable HS-CAN transceiver (ISO11898-2 / -5)
- Charge pump for external active reverse polarity protection
- Gate control for external KL30 switch to reduce sleep current
- Sensor supply voltage regulator 5V / 50mA
- Highside driver typ. 150 mOhm
- Integrated watchdog
- Failsafe fuctionality
- Operating range 5.5V up to 28V
- Typ. 35μA sleep current consumption
- Package QFN32L5

Applications

- ECUs connected to the CAN bus
- Light ECUs

General Description

The CAN SBC family provides beside the CAN the main μ C power supply with 3.3V/5V voltage regulator up to 200mA. Additional independent linear regulator for sensor or peripheral supply.

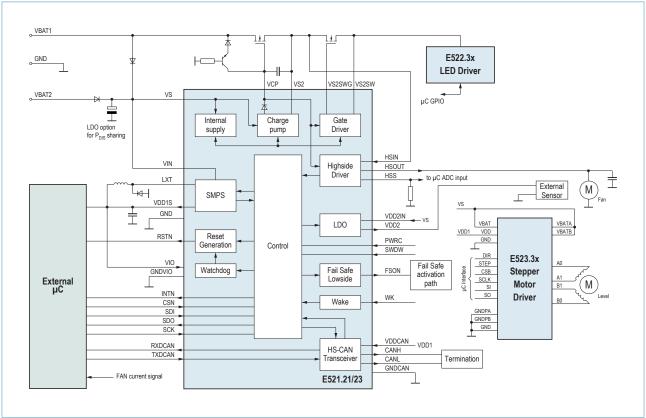
All supplies are monitored and can signalize a fail event by SPI interface. System failure can activate an fail-safe output signal for limp home support. The CAN SBC family provides SLEEP, STOP, ACTIVE, FAILSAFE modes.

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

Ordering Information

Ordering-No.:	Feature	Package
E52121A61C0	1x CAN, 3.3V DC/DC	QFN32L5
E52123A61C0	1x CAN, 5V DC/DC	QFN32L5

Typical Application Circuit



This document contains information on a product under development. Elmos Semiconductor AG reserves the right to change or discontinue this product without notice.

Elmos Support

Headquarters

Elmos Semiconductor AG

Heinrich-Hertz-Str. 1

44227 Dortmund (Germany)

Phone: +49 (0) 231 / 75 49-100 Fax: +49 (0) 231 / 75 49-149

sales-germany@elmos.com

www.elmos.com

Sales and Application Support Office North America

Elmos NA. Inc.

32255 Northwestern Highway, Suite 220 Farmington Hills, MI 48334 (United States)

Phone: +1 (0) 248 / 8 65 32 00 sales-usa@elmosna.com

Sales and Application Support Office China

Elmos Semiconductor Technology (Shanghai) Co., Ltd. Unit 16B, 16F Zhao Feng World Trade Building,

No. 369 Jiang Su Road, Chang Ning District,

Shanghai, PR China, 200050

Phone: +86 (0) 21 / 6210 0908 +86 (0) 21 / 6219 7502 sales-china@elmos.com

中国地区销售与应用支持

艾尔默斯半导体技术(上海)有限公司 中国 上海市 长宁区 江苏路369号 兆丰世贸大厦16楼 16B单元, 200050

电话: +86 (0) 21 / 6210 0908 传真: +86 (0) 21 / 6219 7502 sales-china@elmos.com

Sales and Application Support Office

Korea

Elmos Korea

B-1007, U-Space 2, #670 Daewangpangyo-ro, Sampyoung-dong, Bunddang-gu, Sungnam-si

Kyounggi-do 463-400 Korea Phone: +82 (0)31 / 7 14 11 31 sales-korea@elmos.com

Sales and Application Support Office

Japan

Elmos Japan K.K. BR Shibaura N Bldg. 7F

3-20-9 Shibaura, Minato-ku,

Tokyo 108-0023 Japan

Phone: +81 3 / 3451-7101

Fax: +81 3 / 3451-7104 sales-japan@elmos.com

Sales and Application Support Office Singapore

Elmos Semiconductor Singapore Pte Ltd.

3A International Business Park

#09-13 ICON@IBP

609935 Singapore

Phone: +65 (0) 6908 1261 Fax: +65 (0) 6570 5906

sales-singapore@elmos.com