Fantastic Design with One IC.

Benefits

- Output current capability up to 40mA per channel
- SOIC8EP package with internal heat slug
- Advanced ESD and ISO pulse robustness
- Internal LIN transceiver with LIN auto addressing

Key Features

- Battery supply voltage 5V to 28V
- 3 high-precision current mode LED driver
- 4 independent PWM generators
- 16 bit resolution and 48MHz clock
- JTAG debug interface usable as GPIO and/or analog input
- Integrated 16 bit microcontroller
- Different internal memory structures: EEPROM, RAM and SysROM
- Different diagnostic features



Position Detection, High Flexibility and LIN Interface.

Design a New Experience.











The Elmos Ambient LED Light Controllers offers one of the most flexible solutions worldwide. Furthermore you can control static and/or dynamic RGB light application within a LIN bus system.

Overview E521.36

The E521.36 is a one chip solution for RGB ambient light application. It provides an integrated 16-bit microcontroller with 32kByte memory, EEPROM, a LIN transceiver supporting LIN autoaddressing.

The integrated current sources can be controlled by a 16bit PWM with a 48MHz clock. This enables PWM cycle frequencies up to 700Hz with full resolution. Each driver can be used to drive external loads with currents up to 40mA. For power management and temperature compensation the device provides an integrated temperature sensor as well as an supply voltage sensing circuitry. Furthermore, with the ADC in the measurement system and the differential measurement of the forward voltage an effective compensation for ageing and temperature can be implemented.

LIN Auto-Addressing

Elmos could successfully implement the established method of auto-addressing for RGB LIN Controller.

The device supports an auto-addressing feature using the bus shunt method (BSM). The auto-addressing feature added to the normal LIN bus functionality allows slave devices to detect their relative position within a bus system.

E Eli Pr Eli Pr Eli Pr Eli Pr Eli Pr Eli V V Elin the an nooi doo pro

elmos

Unleash your Creativity. Don't Worry About Configuration.

GET YOUR ELMOS AMBIENT LED CONTROLLER

Elmos Support

Elmos Semiconductor AG | Headquarters

Phone: +49 (0) 231 / 75 49-100 | sales-germany@elmos.com

Elmos NA Inc. Phone: +1 (0) 248 / 8 65 32 00 | sales-usa@elmos.com

Elmos Semiconductor Technology (Shanghai) Co., Ltd.

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

Elmos Korea Co., Ltd.

Phone: +82 (0) 31 / 7 14 11 31 | sales-korea@elmos.com

Elmos Japan K.K. Phone: +81 3 / 3451-7101 | sales-japan@elmos.com

Elmos Semiconductor Singapore Pte Ltd.

Phone: +65 (0) 6908 / 12 61 | sales-singapore@elmos.com

www.elmos.com | automotive-led-driver.elmos.com

Elmos Semiconductor AG (hereinafter: "Elmos") reserves the right to make changes to the products contained in this flyer without prior notice. This flyer does not constitute an offer to sell any products. Elmos does not assume any responsibility (neither liability nor warranty) for any inaccuracy or incompleteness of the information provided. Elmos does not assume any liability regarding damages caused by the use of any information provided, including any kind of information that is incomplete or incorrect, unless (and only to the extent) statutory law requires Elmos mandatorily to assume liability (e.g. in cases of intent). Circuit diagrams may contain components not being manufactured by Elmos, which are included as means of illustrating typical applications. Reproduction of this flyer in part or whole, without the prior written consent of Elmos, is expressly prohibited. © Elmos Semiconductor AG. 2018.

Simplify your System: One IC, manifold applications, always fantastic performance

• AMBIENT LIGHT E521.31 | E521.36

• **READING LAMP** E522.80-87 | E522.90-93 | E522.10

- FLOOR LIGHT E522.80-87 | E522.90-93
- ENTRANCE LIGHT E522.80-87 | E522.90-93

- **TAIL LAMP** E522.80-87 | E522.90-93
- **BRAKE LAMP** E522.80-87 | E522.90-93
- **BACK UP LIGHT** E522.80-87 | E522.90-93
- **REAR FOG LIGHT** E522.80-87 | E522.90-93 | E522.01-10
- DIRECTION
- **INDICATOR LIGHT** E522.80-87 | E522.90-93

FOG LIGHT	
E522.80-87	E522.90-93
E522.01-10	

- LOW BEAM LIGHT	E522.31-34
HIGH BEAM LIGHT	E522.31-34
CURVE LIGHT	E522.80-87
SIDE LIGHT	E522.80-87

- DIRECTION INDICATOR LIGHT E522.80-87 E522.90-93
- HEADLIGHT ADJUST
- E523.30



THIRD BRAKE LAMP
 E522.80-87 | E522.90-93

E522.10 E522.10 E522.90-93 | E522.01-10 E522.90-93 E522.90-93

Ambient LED Controller
Other LED Applications