

Triple 60mA Linear LED Controller

E522.84/85/86/87

Preliminary Information - Dec 4, 2015



Features

- Three integrated Linear Current Drivers (3*60mA)
- Parallel Output Operation for up to 180mA
- Low Power Standby / Sleep Mode
- Operating Input Voltage Range 5V to 25V, max. 40V
- External Reference Voltage / Derating Supported
- Common PWM Dimming (All channels in parallel)
- Diagnostic Functionalities (LED Driver Open/Short,
 IR Config Open/Short, Junction Temperature, Supply Voltage)
- Diagnostic Bus to link ICs
- "Single Lamp Behaviour" implemented
- AEC-Q100 Qualification

Applications

- Automotive LED Lighting, Rear Lighting
- Turn Indicator Driver
- Low Current Interior Lighting
- Industrial LED Applications or simple RGB Drivers

Ordering Information

Ordering-No.:	Temp _{Junc} Range	Package
E52284A80D	-40°C to +150°C	SOIC8EP
E52285A80D	-40°C to +150°C	SOIC8EP
E52286A80D	-40°C to +150°C	SOIC8EP
E52287A80D	-40°C to +150°C	SOIC8EP

General Description

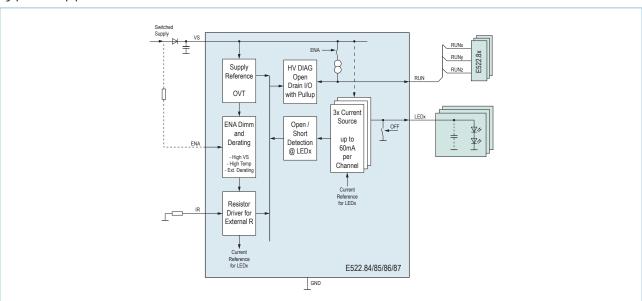
E522.84/85/86/87 family devices provide triple linear current controller for LED driving (standalone driver or LED cluster). Diagnostic features are provided to meet automotive requirements, together with a communication interface "RUN" to link ICs to generate more than three channels, supporting common current configuration per IC and including digital PWM dimming via fast ENA.

"Single Lamp Mode" allows to simulate the fail-behaviour of a single bulb to e.g. meet legal restrictions regarding lighting.

Internal derating for reference voltage and overtemperature shutdown for extreme temperatures >180°C protect E522.8x in case of abnormal operation conditions.

A high voltage capable input ENA can be used to digitally enable or disable E522.8x. In addition, this input may be used as analog reference voltage input, e.g. to realize thermal derating.

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

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