

### Features

- ▶ 8 or 12 high current outputs
- ▶  $R_{ON} = 1.5\Omega$  (typ.)  $I_{MAX} = 350mA$
- ▶ Outputs combinable for higher loads
- ▶ Digital voltage range VDD 3.3V or 5.0V
- ▶ Low standby current  $< 1\mu A$  @50°C
- ▶ Low output leakage  $< 5\mu A$  @13V, RT
- ▶ SPI interface with diagnostics
- ▶ Open load detection
- ▶ Short circuit limitation, - detection
- ▶ Output clamping for inductive loads typ.  $>40V$
- ▶ Thermal overload protection
- ▶  $-40^{\circ}C$  to  $+125^{\circ}C$  operation temperature (QFN)

### Applications

- ▶ Stepper Motor Driver with Stall Detection
- ▶ DC Motor Driver with PWM
- ▶ Relay Driver with VBAT- automatically PWM
- ▶ LED Driver with 3 logarithmic PWM sources
- ▶ Switch Monitoring with pulsed current check and control lamp
- ▶ Switch Monitoring with control lamp

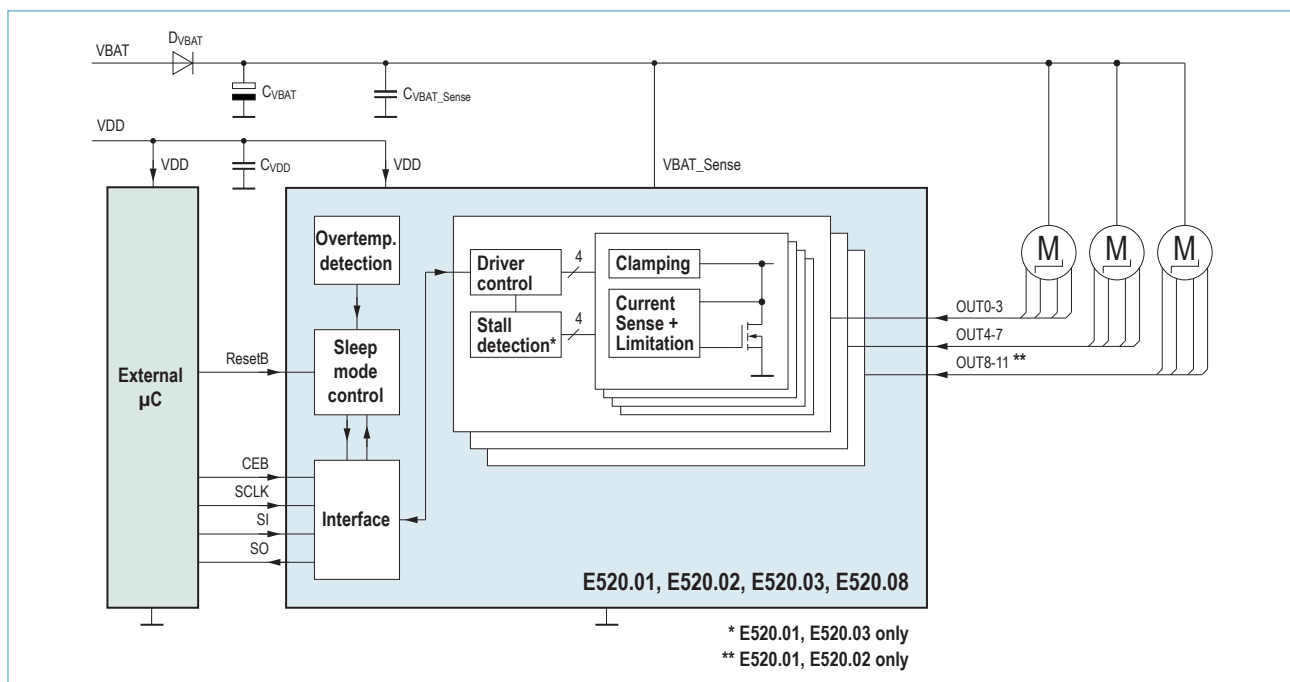
### General Description

The IC drives 2 or 3 unipolar stepper motors and provides an optional stall detection for end position detection. For LED dimming a quasi logarithmic duty cycle is following the physiology of the human eye. With 3 PWM sources color LEDs can be driven in 3-color LED mode (245Hz PWM). The Relay PWM mode automatically adjusts the PWM to an effective supply voltage of typ. 11V. All outputs are short circuit and over-temperature protected with error read back capability. Switch monitoring with control lamp combination with only 1 wire and output is possible.

### Ordering Information

Product ID	Channels	Stall Detection	Package
E520.01	12	X	QFN32L5, SOIC28
E520.02	12		QFN32L5, SOIC28
E520.03	8	X	QFN32L5, QFN20L5, SOIC20
E520.08	8		QFN32L5, QFN20L5, SOIC20

### Typical Applications Circuit



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# ELMOS Support 06/2012

## 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@elmos.com  
www.elmos.com

## Regional Sales and Application Support Office Munich

**ELMOS Semiconductor AG**  
Am Gefluegelhof 12  
85716 Unterschleißheim/Eching (Germany)  
Phone: +49 (0) 89 / 31 83 70-0  
Fax: +49 (0) 89 / 31 83 70-31  
sales-elmuc@elmos.com

## Sales and Application Support Office North America

**ELMOS NA. Inc.**  
32255 Northwestern Highway, Suite 45  
Farmington Hills, MI 48334 (United States)  
Phone: +1 (0) 248 / 8 65 32 00  
elna-sales@elmosna.com

## Sales and Application Support Office Korea and Japan

**ELMOS Korea**  
Suite 1907  
Park View Office Tower  
6 Jeongja-dong, Bundang-gu, Seongnam-si, Kyonggi-do,  
463-863 Republic of Korea  
Phone: +82 (0)31 / 7 14 11 31  
jin-koo.lee@elmos.com

## Sales and Application Support Office China

**ELMOS Semiconductor Technology (Shanghai) Co., Ltd.**  
Unit London, 1BF GC Tower,  
No. 1088 YuanShen Road,  
Pudong New District,  
Shanghai, PR China, 200122  
Phone: +86 (0) 21 / 5178 5178  
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  
中国上海浦东新区源深路1088号  
葛洲坝大厦1B楼伦敦单元, 200122  
电话: +86 (0) 21 / 5178 5178  
sales\_china@elmos.com

## Sales and Application Support Office Singapore

**ELMOS Semiconductor Singapore Pte Ltd.**  
60 Alexandra Terrace  
#09-31 The Comtech (Singapore 118502)  
Phone: +65 (0) 663 / 5 11 41  
Fax: +65 (0) 663 / 5 11 40  
sales@elmos.com

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