RoHS compliant

Features

- ▸ 8 or 12 high current outputs
- ▸ R_{ON} = 1.5Ω (typ.) I_{MAX} = 350mA
- ▸ Outputs combinable for higher loads
- ▸ Digital voltage range VDD 3.3V or 5.0V
- ▸ Low standby current < 1µA @50°C
- ▸ Low output leakage < 5µA @13V, RT
- ▸ SPI interface with diagnostics
- ▸ Open load detection
- ▸ Short circuit limitation, - detection
- ▸ Output clamping for inductive loads typ. >40V
- ▸ Thermal overload protection
- ▸ -40°C to +125°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
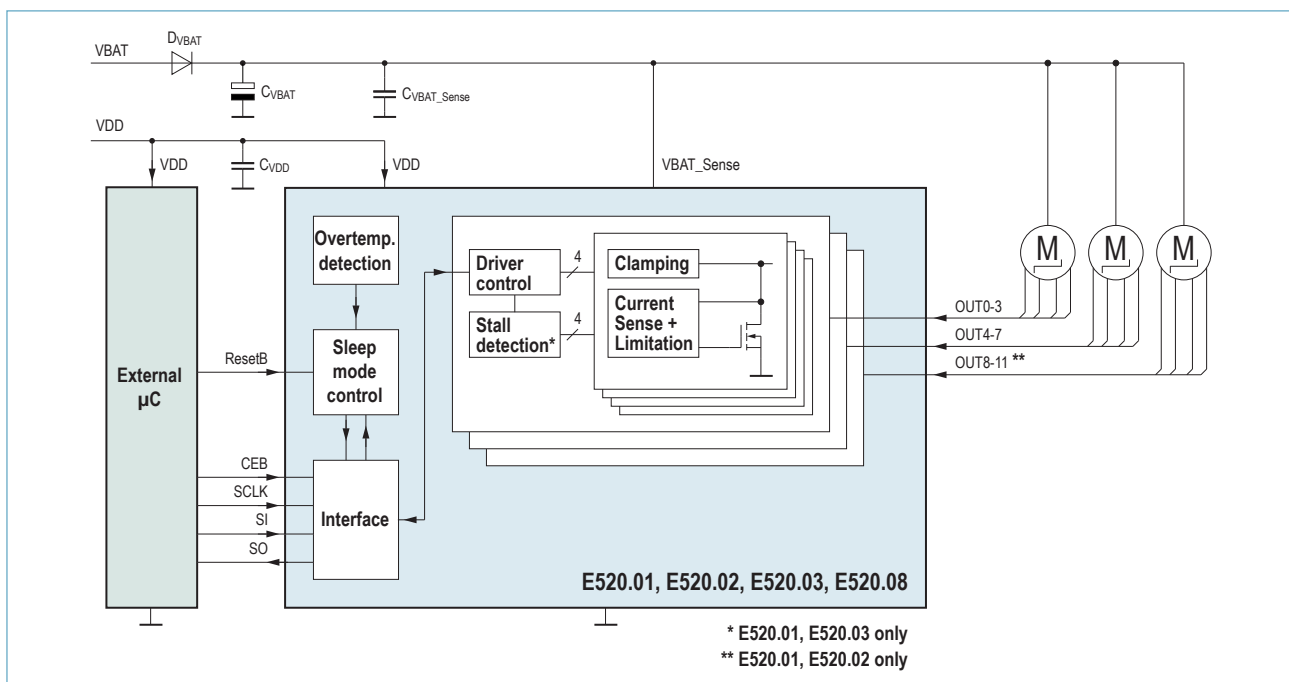- ▸ Switch Monitoring with control lamp

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

* E520.01, E520.03 only
** E520.01, E520.02 only

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

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