

### 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°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

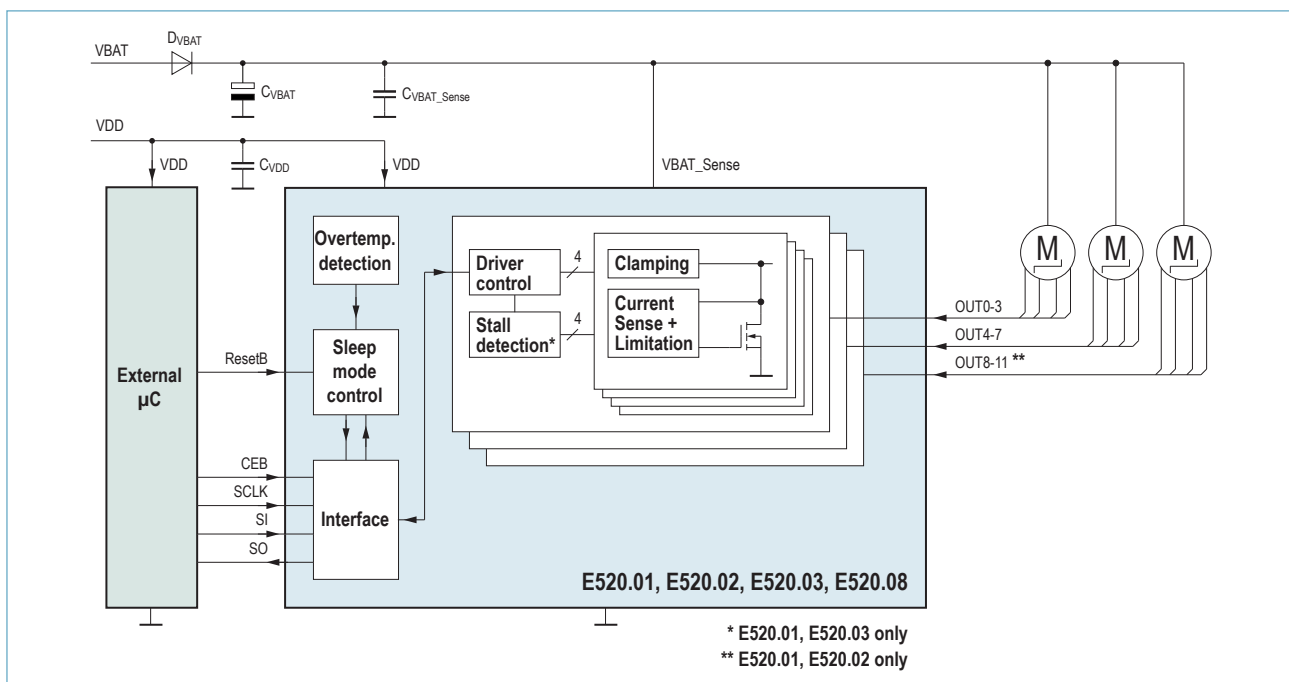
### General Description

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



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