

## Features

- Voltage range 7V to 28V (5V to 42V peak)
- Controls 6 relays, either low-side or high-side driven or 5 bistable relays
- Relay pull-in and holding current can be controlled by PWM inputs
- The PWM has to limit the relay current to 400mA (peak), 75mA (continuous)
- Power supply 3.3V or 5V for external controller
- LIN 2.x interface (1.3), SAE-J2602 or PWM bidirectional
- Several diagnostic and protection functions
- Adjustable window watchdog (independent silicon and clock)
- $T_{Junc}$  peak = +170°C

## Ordering Information

Ordering-No.:	Features	Package
E52301C39B	LIN2.x or PWM interface	QFN44L7
E52301C78B	LIN2.x or PWM interface	QFN48L7
E52301C35E	LIN2.x or PWM interface	QSOP44
E52311C39B	PWM interface only	QFN44L7
E52311C35E	PWM interface only	QSOP44

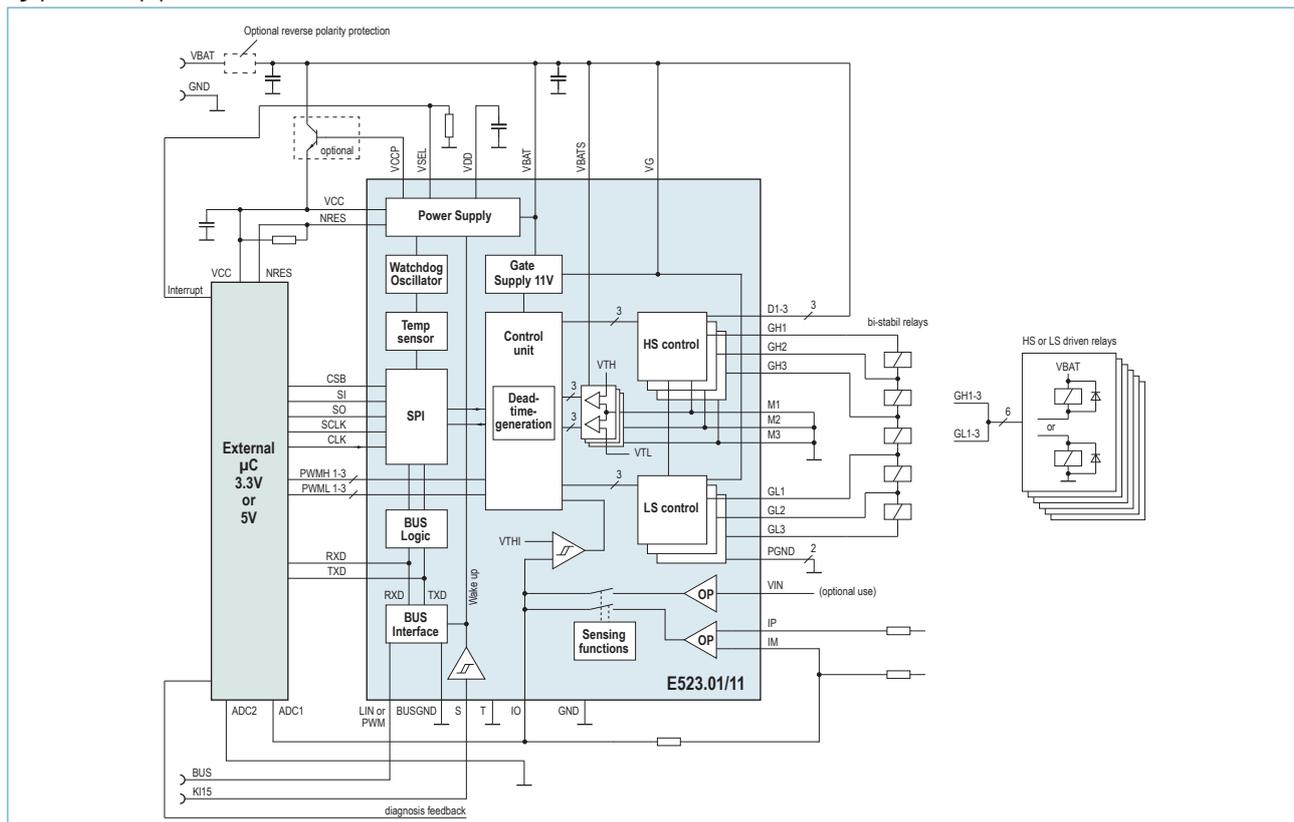
## General Description

The Elmos System-Basis-Chip (SBC) family E523.01/11 controls six relays either low-side or high-side driven or five bistable relays (activation in sequential order). The relay holding current can be programmed by the external micro-controller via the PWM input pins. The IC provides a LIN 2.x(1.3), SAE-J2602 compliant communication interface or PWM-interface with error feedback capability, which can be accessed by an external micro-controller. Also integrated functions are, system power supply (3.3V or 5V selectable) for an external  $\mu$ C and an independent window-watchdog. The IC is configured and controlled over an SPI interface together with one PWM input pin for each relay driver. A set of diagnostic functions is provided, the status information can be read out via SPI. The LIN interface supports a "FLASH Mode" for fast upload of new firmware to the external micro-controller. For fast time-to-market Elmos provides demo-boards as well as design-in support.

## Applications

- LIN2.x or LIN1.3 relay nodes

## Typical Application Circuit



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