

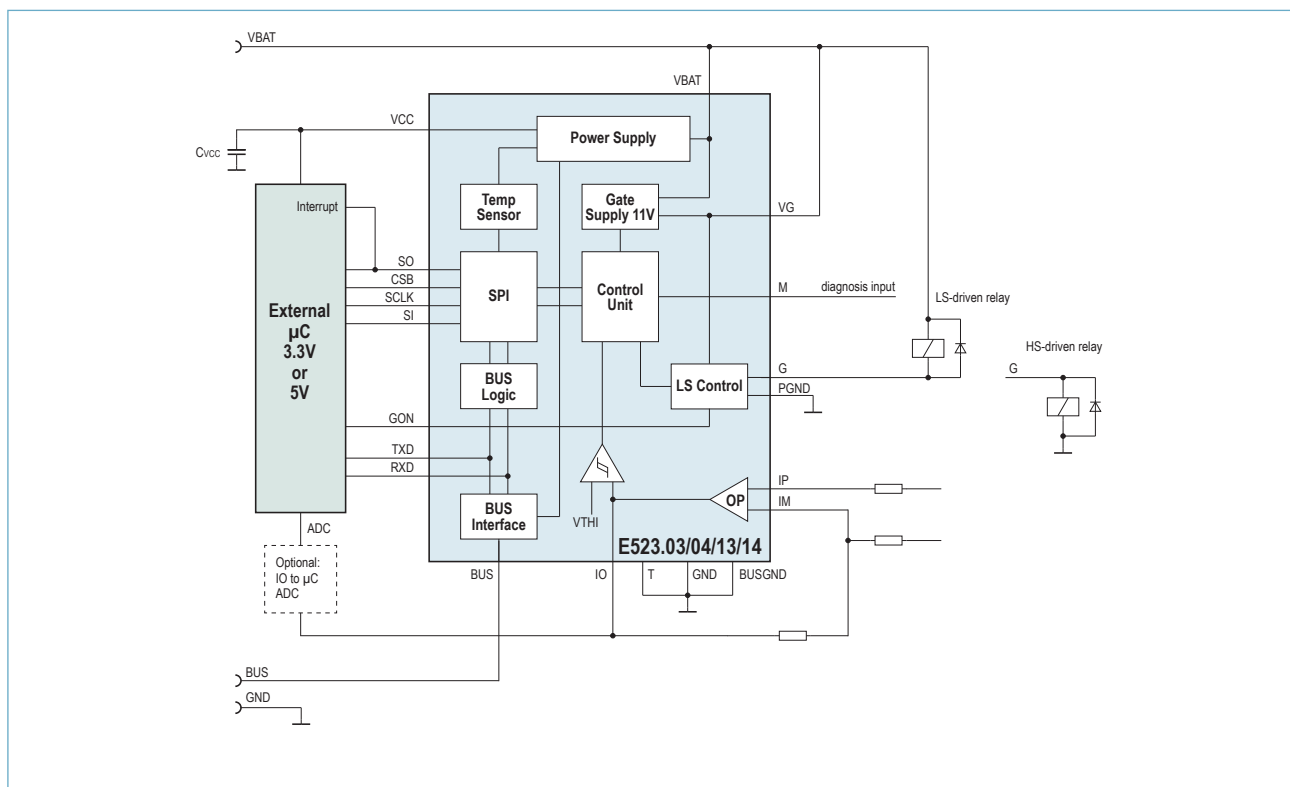
Features

- Voltage range 7V to 28V (5V to 42V peak)
- Controlling 1 low side driven relay or 1 high side driven relay
- Relay pull-in and holding current can be controlled via PWM input
- The PWM has to limit the relay current to 400mA (peak), 75mA (continuous)
- Power supply 3.3V or 5V for external controller
- LIN2.x(1.3), SAE-J2602 interface or PWM interface with error feedback capability
- Several Diagnostic and protection functions
- Adjustable window watchdog (independent silicon and clock)
- $T_{Junc\ peak} = +170^{\circ}C$

Ordering Information

Ordering-No.:	Features	Package
E52303A52C	LIN2.x or PWM interface	QFN20L4
E52303A61C	LIN2.x or PWM interface	QFN32L5
E52304A52C	LIN2.x or PWM interface	QFN20L4
E52304A61C	LIN2.x or PWM interface	QFN32L5
E52313A52C	PWM interface only	QFN20L4
E52314A52C	PWM interface only	QFN20L4

Typical Application Circuit



General Description

The Elmos System-Basis-Chip (SBC) family E523.03/04/13/14 controls one low-side driven relay or one high-side driven relay. 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 μC and an independent window-watchdog.

The IC is configured and controlled over an SPI interface together with one PWM input pin for the 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

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