

Features

- Voltage range 7V to 28V (5V to 42V peak)
- Controls 4 relays, either low-side or high-side driven or 3 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
- 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°C

Ordering Information

Ordering-No.:	Features	Package
E52302C39B	LIN2.x or PWM interface	QFN44L7
E52302C35E	LIN2.x or PWM interface	QSOP44
E52312C39B	PWM interface only	QFN44L7
E52312C35E	PWM interface only	QSOP44

General Description

The Elmos System-Basis-Chip (SBC) family E523.02/12 controls four relays either low-side or high-side driven or three bistable relays (activation in sequential order). The relay holding current can be programmed by the external micro-controller via the PWM input pins.

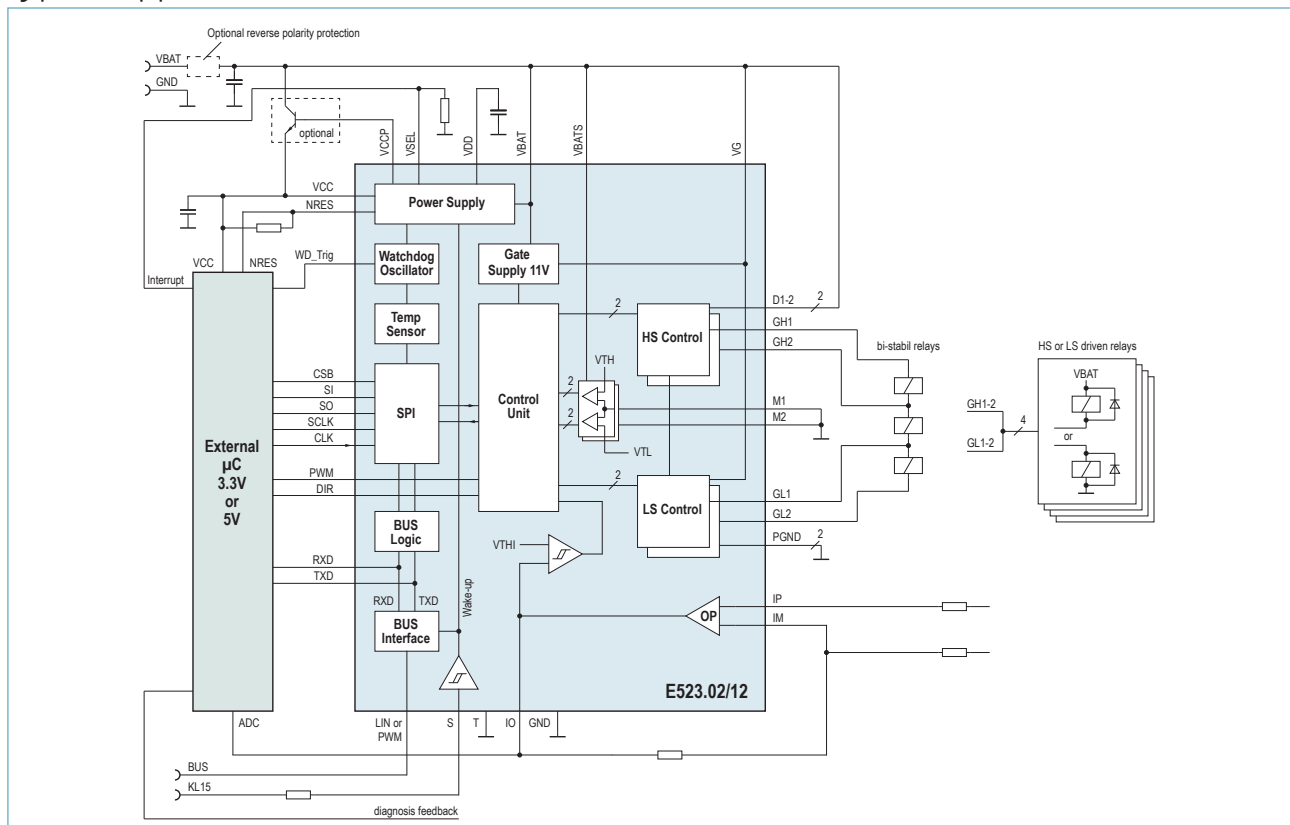
The IC provides a LIN 2.x(1.3), SAE-J2602 compliant communication interface or PWM-interface with error feedback capability, which can be accessed by an external micro-controller. Also integrated functions are, system power supply (3.3V or 5V selectable) for an external μ C and an independent window-watchdog.

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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