

Features

- ▶ Sensor IC based on HALIOS® technology
- ▶ Up to 4 sending channels, 1 compensation channel and 1 differential receiver input for various HALIOS® applications
- ▶ 16 bit micro controller 'EL16' with debug interface
- ▶ Up to 1.5K x 18 (3KByte) SRAM including 2 bit parity per 16 bit word and byte write support
- ▶ Up to 30K x 22 (60KByte) FLASH including 6 bit CRC checksum per 16 bit word
- ▶ SPI and I²C communication interface
- ▶ SCI interface incl. LIN support
- ▶ Watchdog, 32 bit timer, up to 8 GPIOs
- ▶ Multiply unit
- ▶ AEC-Q100 automotive qualification
- ▶ Supply voltage range 2.25V to 2.75V

Applications

- ▶ Optical or capacitive input devices
- ▶ Proximity and gesture detection
- ▶ Compact HMI interfaces for one-dimensional up to three-dimensional input

General Description

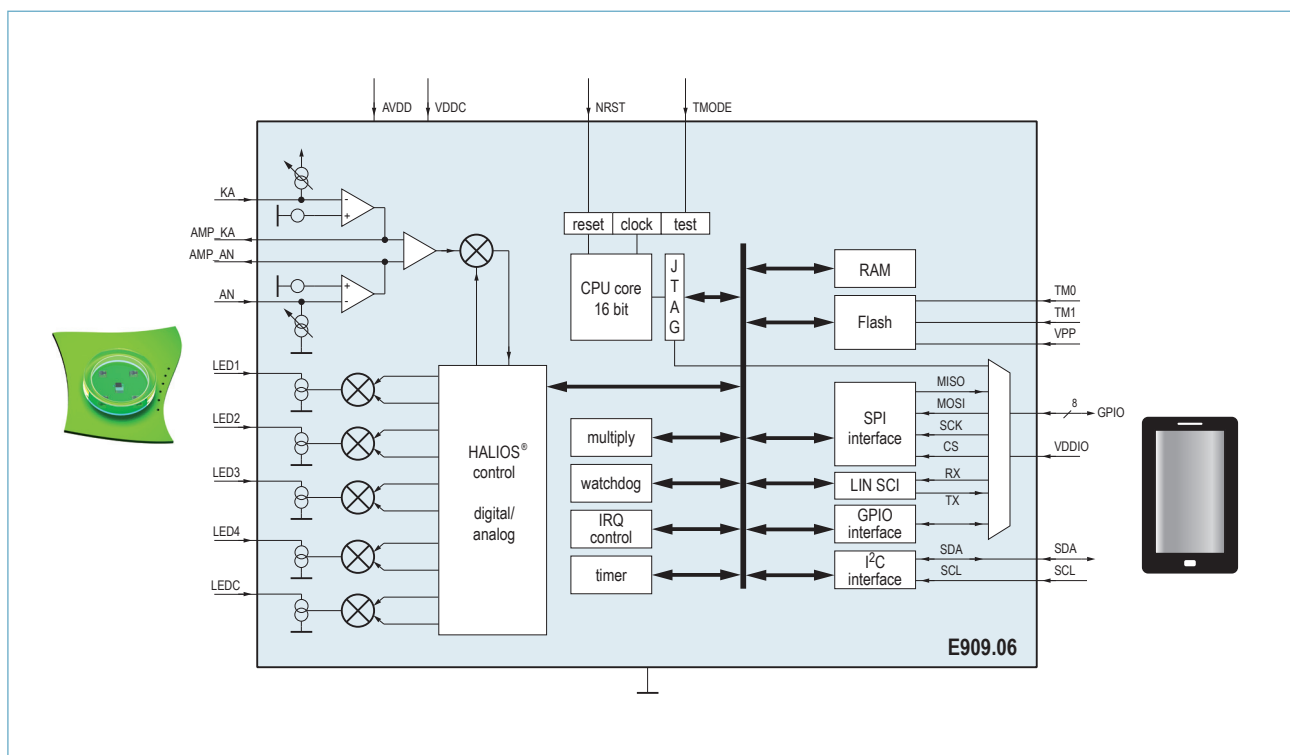
The IC is based on an optical bridge technology which provides a non-mechanical detection of movements.

The system detects the optical reflections of an object in front of the sensor by using a function principle called HALIOS® (High Ambient Light Independent Optical System) which is very effective in the suppression of ambient light and also has self calibration capability to eliminate disturbances caused by housing reflections and scratches.

Ordering Information

Ordering No.:	Temp. Range _{Amb}	Package
E90906A61C	-40°C to +85°C	QFN32L5

In the same manner capacitive systems can be addressed by using the integrated charge amplifier.



Elmos Semiconductor AG reserves the right to change the detail specifications as may be required to permit improvements in the design of its products.

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