

## Features

- ▶ Supply voltage range 2.2V to 3.6V
- ▶ Lowest stand-by current of 0.4µA
- ▶ Up to 1MHz HALIOS® frequency
- ▶ 3 independent sending channels with up to 100mA LED current
- ▶ Ambient light measurement
- ▶ High speed I<sup>2</sup>C interface (up to 3.4MHz)
- ▶ Front-end solution can be combined with any CPU
- ▶ Smart adjustable measurement modes reducing communication traffic
- ▶ Small size Bare-Die or QFN package

## Benefits

- ▶ HALIOS® – the No. 1 IR sensor in the automotive market demonstrating strong quality track record
- ▶ HALIOS® enables 30% better detection range compared to similar IR solutions
- ▶ Absolute minimum external component count for small module design
- ▶ Short pulses for lowest power consumption
- ▶ Best ambient light immunity for increased reliability against fluorescent light
- ▶ Excellent temperature stability, sensitivity and speed
- ▶ Reference design available

## Applications

- ▶ 3 in 1 sensor (gesture, proximity, and ambient light) for portable devices such as smart phones, tablets, notebooks, laptops, digital cameras and more consumer and industrial products enabling touch screen locking, power saving, acknowledge, and many more
- ▶ High performance proximity detection approximately 500mm without any optical or mechanical parts while using a single LED emitter
- ▶ Dimming control for consumer and industrial displays
- ▶ Gesture recognition for consumer, computing and industrial devices and displays

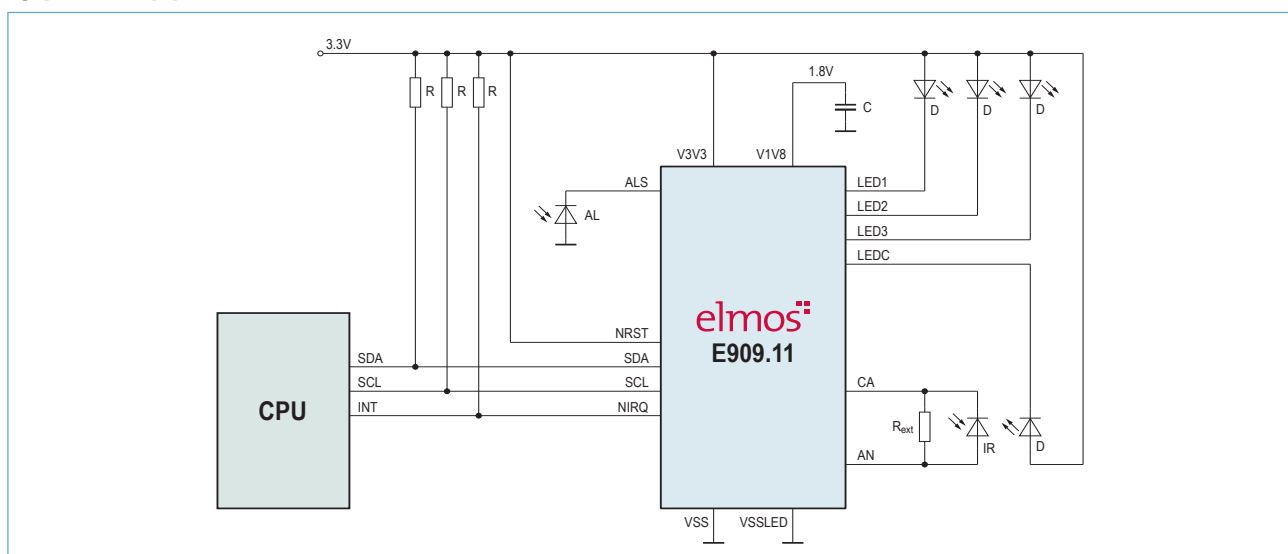
## General Description

Stable and robust IR based gesture and proximity detection device with integrated ambient light sensor. Lowest current consumption together with the outstanding HALIOS® advantages makes this product suitable for every (mobile) device. The high HALIOS® frequency shortens the active measurement time to the minimum. Easy to use due to optimized default setting based on many years of application experience.

## Ordering Information

Ordering No.:	Temp.-Range <sub>Amb</sub>	Package
E90911A01Z	-40°C to +85°C	Bare-Die
E90911A52C	-40°C to +85°C	QFN20L4

## Typical Application Circuit



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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