elmos

HALIOS[®] Signal Conditioner for Proximity and Gesture Recognition E909.22

Preliminary Information - Mar 12, 2019



Features

- Patented HALIOS[®] (High Ambient Light Independent Optical System) control loop
- 4 LED Sending Channels, 100mA per channel
- 2 Receiving Channels
- 1 Compensator Channel
- Scalable HALIOS[®] frequency up to 1MHz
- SSI serial sensor interface
- Ambient light immunity up to 200.000 lux
- Temperature Range -40°C to +105°C
- AEC-Q100 automotive qualified
- Package QFN20L4

Applications

- Proximity and gesture recognition for automotive touch displays
- Driver and passenger detection
- Wake-up function for displays
- Touchless control in harsh environments (e.g. explosion protected areas)

General Description

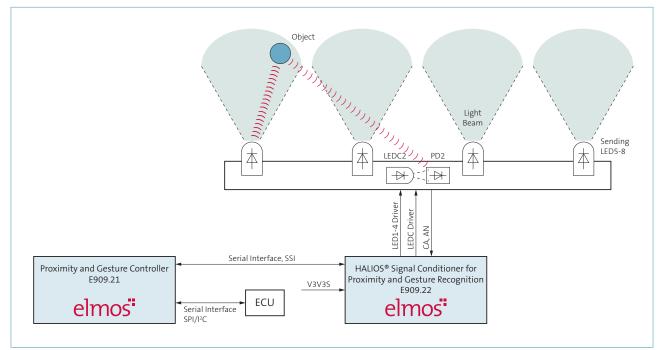
The E909.22 together with the E909.21 controller for proximity and gesture recognition is a dedicated HALIOS[®] system for gesture control applications and optimized for the use for automotive touch displays.

The function principle is based on comparing the light beam, which is reflected by the object to be detected with a reference light beam for most robust object detection. As a result, the device offers best immunity against ambient light, improved sensitivity and automatic calibration over vehicle lifetime.

Ordering Information

C	Ordering-No.	Temp Range	Package
E	90922A52C	-40°C to +105°C	QFN20L4

Typical Application Circuit



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