

Sigma Delta Scale® principle for optical sensors

- ▶ Suppression of parasitic like ambient light, dust, scratches and flickering light reflections
- ▶ Compensating of aging and temperature effects

Features

- ▶ Front end rain sensor amplifier
- ▶ High sensitivity. No total reflection needed
- ▶ 4 Logarithmic input channels for ambient light measurements
- ▶ Two embedded LED Drivers, driving up to 40mA
- ▶ Configurable μ C window watch dog
- ▶ LIN Transceiver (V2.1, SAEJ2602, ISO9141)
- ▶ Very high robustness against sun light
- ▶ Temperature Sensor
- ▶ Extensive Diagnosis
- ▶ Few external components
- ▶ AEC-Q100 Qualification

General Description

The RL IC (Rain and Light Sensor) is intended for controlling an optical sensor unit in automotive wiping systems.

It provides two embedded LED drivers with up to 40mA current for stimuli generation.

A special, high-sensitive receiver allows processing of a diode input signal without total reflection of the send signal, allowing reliable detection of rain. Due to the used HALIOS®-SD measurement method a very high robustness against sun light is provided.

The device has four additional input channels for ambient light measurements.

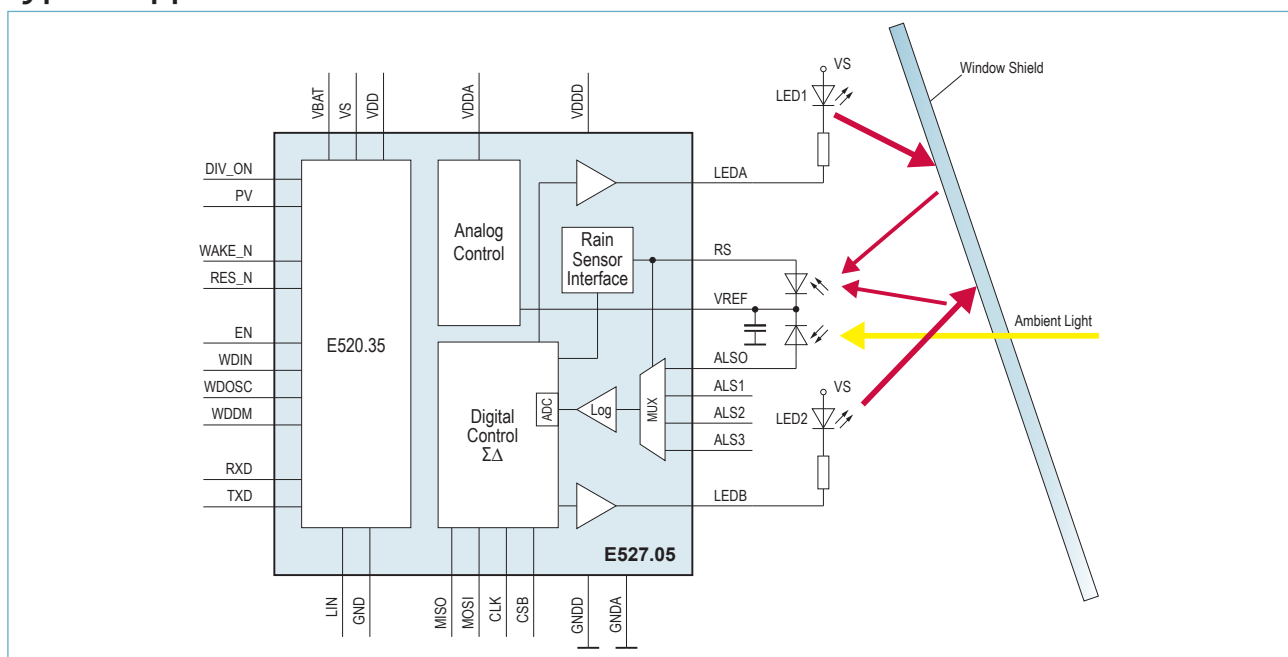
Applications

- ▶ Optical rain sensing to control wiping systems
- ▶ Ambient light measurements to control
- ▶ Headlights
- ▶ Head-up Displays
- ▶ Air Conditioning

Ordering Information

Ordering No.	Temp _{Amb} Range	Package
E52705A39B	-40°C to +105°C	QFN44L7

Typical Application Circuit



This document contains information on a product under development. Elmos Semiconductor AG reserves the right to change or discontinue this product without notice.

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