

## 3D Image Sensor

Preliminary Information - Jul 7, 2020

E527.31



### Features

- Dedicated for distance measurement
- 46 x 46 Pixel Sensor Array
- Read-out for 32 x 32 Pixel
- Ambient light suppression by 850 nm bandpass filter
- Flexible start-address to select area of interest
- Background light subtraction
- Correlated Double Sampling (CDS)
- SPI Interface
- Fast and slow repetition rate to support laser and LED-illumination
- 1ns step resolution for illumination delay
- Laser/LED off functionality
- Integrated temperature Sensor
- Low sleep-mode current (no function, register content is held)
- Low standby current (2-D image functionality)
- Supply Voltage 5V
- AEC-Q 100 Qualification

### General Description

Together with a dedicated optics the E527.31 sensor device allows to build a Time-of-Flight camera which is capable of measuring absolute spatial distance.

The device controls a laser-diode or LED sending short pulses of IR light. An integrated array of purpose-designed photo diodes detects the radiation reflected by an object. From the digital data provided by the sensor device the distance information can be derived by dedicated software algorithm. The E527.31 equally supports laser- and LED-illumination.

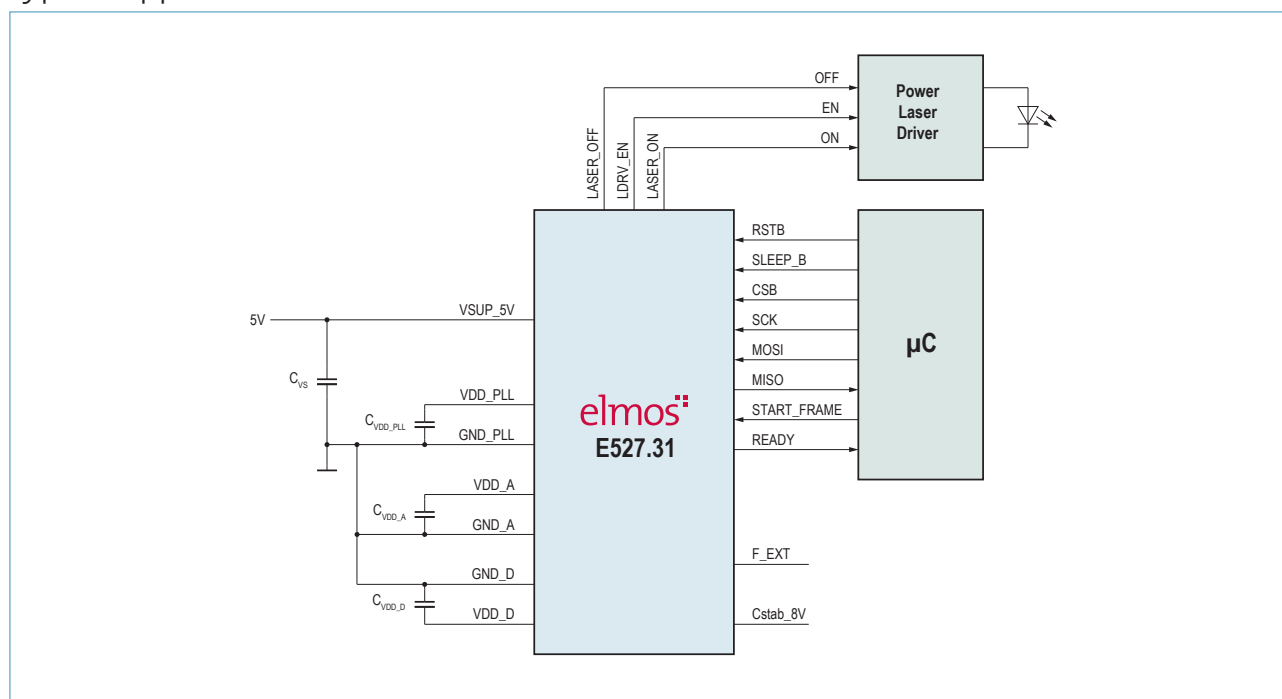
### Ordering Information

Ordering-No.:	Temp. Range	Package
E52731A06B	-40°C to +85°C	QFN44L7IR

### Applications

- Trunk Opener
- Keyless Entry
- Gesture Recognition

### Typical Application Circuit



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